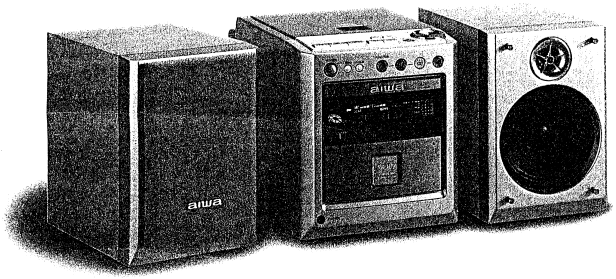
aiwa SERVICE

XR-M78 EZ
XR-M77 K



SERVICE MANUAL

COMPACT DISC STEREO SYSTEM

BASIC CD MECHANISM : KSM-213CDM

aiwa

S/M Code No. 09-995-331-7R2

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SPECIFICATIONS

MAIN UNIT XR-M77/XR-M78

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

MW tuner section

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

LW tuner section

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

Amplifier section

Power output	Rated: 12W + 12W (4 ohms, T.H.D. 1%, 1 kHz/DIN 45500) Reference: 15 + 15 W (4 ohms, T.H.D. 10%, 1 kHz/DIN 45324) EZ MODEL: DIN MUSIC POWER 36 W + 36 W
Inputs	AUX IN: 800 mV MD IN: 800 mV
Outputs	LINE OUT: 1.7 V SPEAKERS: accept speakers of 4 ohms or more PHONES (stereo minijack): accepts headphones of 16 ohms or more DIGITAL OUT: more than –21dBm

Compact disc player section

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	90 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

SPEAKER SYSTEM SX-LM77/ SX-LM78

Cabinet type	2 way, bass reflex (magnetic shielded type)
Speakers	Woofer: 100 mm cone type Tweeter: 22 mm dome type
Impedance	4 ohms
Output sound pressure level	86 dB/W/m
Dimensions (W × H × D)	116 × 170 × 197 mm
Weight	1.4 kg

General

Power requirements	230 V AC, 50Hz
Power consumption	50 W
Standby power consumption	1.4 W (power-economizing mode set to ON)
Dimensions (W × H × D)	144 × 170 × 280 mm
Weight	3.3 kg

- Design and specifications are subject to change without notice.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.
- The word "BBE" and the "BBE symbol" are trademarks of BBE Sound,Inc.
  Under license from BBE Sound,Inc.

ACCESSORIES/PACKAGE LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

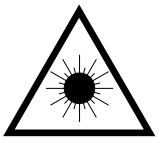
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	87-A90-030-010		ANT,LOOP AM-NC C
2	87-A90-118-010		ANT,WIRE FM (Z)
3	8Z-CLF-906-010		IB,EZ(9L)A<EZS>
3	8Z-CLF-905-010		IB,K(E)A<KS>
4	8Z-CK4-962-010		RC UNIT,RC-ZAT04 (VS)

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynling laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

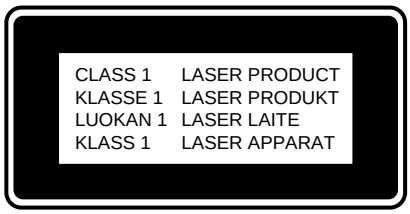
ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

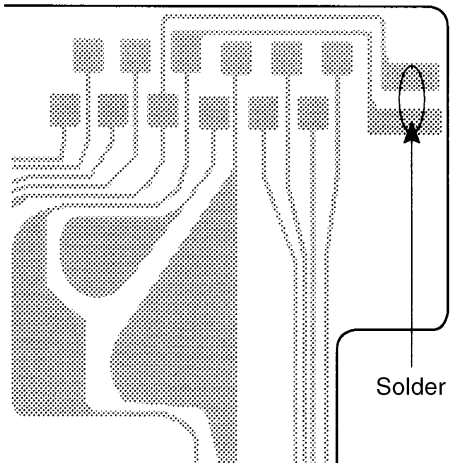


Precaution to replace Optical block (KSS-213C)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in the right figure.

PICK-UP Assy P.C.B



ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8Z-CL5-601-010		C-IC,LC876564
	87-070-282-010		IC,BU2092
	8Z-CL5-616-010		IC,RPM638CBRL676/6938-V4
	87-A20-446-010		C-IC,LA9241ML
	87-A20-459-010		C-IC,LC78622ED
	87-A20-445-010		IC,BA5936
	87-A21-111-040		C-IC,M62495FP
	87-A21-022-040		C-IC,BA3880FS
	87-017-915-080		IC,BU4094BCF
	87-070-391-040		IC,BA4558F
	87-A20-909-010		IC,LA4663
	87-070-127-110		IC,LC72131 D
	87-A20-913-010		IC,LA1837NL
TRANSISTOR			
	89-327-125-080		CHIP TR,2SC2712GR
	87-A30-087-080		C-FET,2SK2158
	87-026-230-080		CHIP-TR,DTA114YK
	89-111-625-080		TR,2SA1162 (0.15W)
	87-026-235-080		CHIP-TR,DTC114EK
	87-026-463-080		TR,2SA933S (0.3W)
	87-026-239-080		TR,DTC114TK (0.2W)
	87-026-213-080		CHIP-TR,DTC114YK
	89-213-702-010		TR,2SB1370 (1.8W)
	87-026-211-080		TR,DTA144EK
	S7-805-000-020		TR,PE8050
	87-026-210-080		TR,DTC144EK
	89-318-155-810		TR,2SC1815GR
	S7-855-000-020		TR,PE8550EK
	87-026-235-010		TR,DTC114EK
DIODE			
	87-A40-345-080		ZENER,MTZJ10C
	87-070-345-080		DIODE,IN4148
	87-A40-337-080		ZENER,MTZJ 6.8B
	88-CD9-651-090		DIODE,J05
	87-A40-466-080		ZENER,MTZJ2.7A
	87-002-743-080		ZENER,MTZJ 33B
	8Z-CL5-626-010		DIODE,6A1
	S8-CM2-609-010		DIODE,IN4001B
MAIN C.B			
C510	87-015-688-080		CAP,E 4.7-35 7L
C511	87-015-688-080		CAP,E 4.7-35 7L
C512	87-015-688-080		CAP,E 4.7-35 7L
C513	87-015-688-080		CAP,E 4.7-35 7L
C514	87-015-688-080		CAP,E 4.7-35 7L
C515	87-010-188-080		CAP,CHIP 6800P
C516	87-010-188-080		CAP,CHIP 6800P
C517	87-012-140-080		CAP 470P
C518	87-012-140-080		CAP 470P
C519	87-010-178-080		CHIP CAP 1000P
C520	87-010-178-080		CHIP CAP 1000P
C521	87-015-695-080		CAP,E 1-50 7L
C522	87-015-695-080		CAP,E 1-50 7L
C523	87-010-196-080		CHIP CAPACITOR,0.1-25
C524	87-015-684-080		CAP,E 47-16 7L
C525	87-010-178-080		CHIP CAP 1000P
C526	87-010-197-080		CAP, CHIP 0.01 DM
C528	87-010-195-080		C-CAP,S 0.068-25 F
C530	87-015-684-080		CAP,E 47-16 7L
C531	87-010-196-080		CHIP CAPACITOR,0.1-25
C532	87-010-322-080		C-CAP,S 100P-50 CH
C545	87-015-696-080		CAP,E 2.2-50 7L
C546	87-015-696-080		CAP,E 2.2-50 7L
C551	87-010-213-080		C-CAP,S 0.015-50 B
C552	87-010-213-080		C-CAP,S 0.015-50 B
C553	87-015-688-080		CAP,E 4.7-35 7L
C554	87-015-688-080		CAP,E 4.7-35 7L
C555	87-015-692-080		CAP,E 0.22-50 7L
C556	87-015-692-080		CAP,E 0.22-50 7L
C557	87-015-692-080		CAP,E 0.22-50 7L
C558	87-015-692-080		CAP,E 0.22-50 7L
C561	87-015-680-080		CAP,E 47-10 7L
C562	87-015-680-080		CAP,E 47-10 7L
C563	87-010-154-080		CAP CHIP 10P
C565	87-015-688-080		CAP,E 4.7-35 7L
C566	87-015-688-080		CAP,E 4.7-35 7L
C567	87-015-679-080		33U 10V SRA
C568	87-015-679-080		33U 10V SRA
C585	87-015-695-080		CAP,E 1-50 7L
C586	87-015-695-080		CAP,E 1-50 7L
C804	87-010-196-080		CHIP CAPACITOR,0.1-25
C805	87-010-196-080		CHIP CAPACITOR,0.1-25
C806	87-010-196-080		CHIP CAPACITOR,0.1-25
C807	87-010-196-080		CHIP CAPACITOR,0.1-25
C808	87-010-389-090		CAP, E 2200-25 SME
C809	87-012-140-080		CAP 470P
C811	87-010-060-080		ELECTROLYTIC 100-16V
C812	87-010-060-080		ELECTROLYTIC 100-16V
C813	87-010-235-080		CAP,E 470-16 SME
C819	87-010-194-080		CAP, CHIP 0.047
C820	87-010-194-080		CAP, CHIP 0.047
C821	87-010-889-010		CAP,E 6800-25
C822	87-010-387-080		CAP,E 470-25 SME
C829	87-015-681-080		CAP,E 10-16 7L
C830	87-010-197-080		CAP, CHIP 0.01 DM
C833	87-010-213-080		C-CAP,S 0.015-50 B
C834	87-010-213-080		C-CAP,S 0.015-50 B
C835	87-015-688-080		CAP,E 4.7-35 7L
C836	87-015-688-080		CAP,E 4.7-35 7L
C837	87-010-247-080		CAP, ELECT 100-50V
C847	87-015-691-080		CAP,E 0.1-50 7L
C848	87-015-691-080		CAP,E 0.1-50 7L
C849	87-010-182-080		C-CAP,S 2200P-50 B
C850	87-010-182-080		C-CAP,S 2200P-50 B
C853	87-010-060-080		ELECTROLYTIC 100-16V
C854	87-010-060-080		ELECTROLYTIC 100-16V
C855	87-010-060-080		ELECTROLYTIC 100-16V
C856	87-010-060-080		ELECTROLYTIC 100-16V
C859	87-015-694-080		CAP,E 0.47-50 7L
CN201	87-A60-778-010		CONN,18P B TMC-D(P)
CN203	8Z-CL5-618-010		CONN,7P H WHT 528070710
CN803	87-009-031-010		CONNECTOR, 3P
⚠FR802	S1-250-300-000		FUSE,2.5A 60V
⚠FR803	S1-250-300-000		FUSE,2.5A 60V
J801	87-009-216-010		JACK, DIA 3.5
J802	87-A60-238-010		TERMINAL,SP 4P (MSC)
L801	87-005-742-080		COIL,100UH J SP02
L802	87-005-742-080		COIL,100UH J SP02
W801	8Z-CL5-622-010		F-CABLE,9P 2.5 250MM UL2468 AW
FRONT C.B			
C201	87-010-196-080		CHIP CAPACITOR,0.1-25
C202	87-010-196-080		CHIP CAPACITOR,0.1-25
C203	87-010-196-080		CHIP CAPACITOR,0.1-25
C204	87-015-698-080		CAP,E 4.7-50 7L
C205	87-015-698-080		CAP,E 4.7-50 7L
C206	87-010-408-080		CAP, ELECT 47-50V
C207	87-010-196-080		CHIP CAPACITOR,0.1-25
C208	87-010-322-080		C-CAP,S 100P-50 CH
C209	87-010-196-080		CHIP CAPACITOR,0.1-25
C210	87-010-312-080		C-CAP,S 15P-50 CH
C211	87-010-198-080		CAP, CHIP 0.022
C212	87-010-196-080		CHIP CAPACITOR,0.1-25

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C213	87-012-145-080		CAP, CHIP S 270P CH
C214	87-010-178-080		CHIP CAP 1000P
C215	87-015-681-080		CAP,E 10-16 7L
C216	87-015-694-080		CAP,E 0.47-50 7L
C217	87-010-196-080		CHIP CAPACITOR,0.1-25
C218	87-010-370-080		CAP, ELECT 330-6.3V
C221	87-010-196-080		CHIP CAPACITOR,0.1-25
C222	87-015-694-080		CAP,E 0.47-50 7L
C223	87-010-196-080		CHIP CAPACITOR,0.1-25
C224	87-015-681-080		CAP,E 10-16 7L
C225	87-010-194-080		CAP, CHIP 0.047
C227	87-010-248-080		CAP, ELECT 220-10V
C228	87-010-196-080		CHIP CAPACITOR,0.1-25
C229	87-015-696-080		CAP,E 2.2-50 7L
CN201	87-A60-770-010		CONN,18P B TMC-D(X)
CN205	8Z-CL5-617-010		CONN,7P V WHT 528060710
D217	87-020-331-080		CHIP-DIODE,DAN202K
D219	87-020-331-080		CHIP-DIODE,DAN202K
D220	87-020-331-080		CHIP-DIODE,DAN202K
D221	87-020-331-080		CHIP-DIODE,DAN202K
D222	87-020-330-080		DIODE,DAP202K
DP201	8Z-CL1-630-010		FL,13-ST-36GNAK
L201	87-A50-052-010		COIL,CLOCK 5.76MHZ T1
LED201	8Z-CL5-613-010		LED,SE6201AT RED W/REFCT
LED202	8Z-CL5-615-010		LED,W03327GRHW GR/RED DUAL COL
LED203	8Z-CL5-615-010		LED,W03327GRHW GR/RED DUAL COL
LED204	8Z-CL5-615-010		LED,W03327GRHW GR/RED DUAL COL
LED205	8Z-CL5-615-010		LED,W03327GRHW GR/RED DUAL COL
S201	87-036-073-010		TACT SWITCH
S202	87-036-073-010		TACT SWITCH
S203	87-036-073-010		TACT SWITCH
S204	87-036-073-010		TACT SWITCH
S205	87-036-073-010		TACT SWITCH
S206	87-036-073-010		TACT SWITCH
S207	87-036-073-010		TACT SWITCH

CD C.B

C401	87-015-697-080		CAP,E 3.3-50 7L
C402	87-010-197-080		CAP, CHIP 0.01 DM
C403	87-010-264-010		CAP,E 100-10
C404	87-010-754-080		CAP,E220-10 SRA 7L
C405	87-010-197-080		CAP, CHIP 0.01 DM
C406	87-015-680-080		CAP,E 47-10 7L
C407	87-010-178-080		CHIP CAP 1000P
C408	87-010-198-080		CAP, CHIP 0.022
C409	87-010-754-080		CAP,E220-10 SRA 7L
C410	87-010-060-080		ELECTROLYTIC 100-16V
C412	87-015-691-080		CAP,E 0.1-50 7L
C413	87-010-193-080		CHIP CAPACITOR,0.033
C414	87-015-681-080		CAP,E 10-16 7L
C416	87-015-692-080		CAP,E 0.22-50 7L
C417	87-012-157-080		C-CAP,S 330P-50 CH
C418	87-010-213-080		C-CAP,S 0.015-50 B
C420	87-010-193-080		CHIP CAPACITOR,0.033
C422	87-010-183-080		C-CAP,S 2700P-50 B
C423	87-010-195-080		C-CAP,S 0.068-25 F
C425	87-010-176-080		C-CAP,S 680P-50 SL
C429	87-010-186-080		CAP,CHIP 4700P
C430	87-012-156-080		C-CAP,S 220P-50 CH
C431	87-015-694-080		CAP,E 0.47-50 7L
C431	87-015-692-080		CAP,E 0.22-50 7L<EZ>
C432	87-015-680-080		CAP,E 47-10 7L
C433	87-015-695-080		CAP,E 1-50 7L
C434	87-010-184-080		CHIP CAPACITOR 3300P(K)
C435	87-010-197-080		CAP, CHIP 0.01 DM
C436	87-015-680-080		CAP,E 47-10 7L
C437	87-015-688-080		CAP,E 4.7-35 7L
C438	87-010-196-080		CHIP CAPACITOR,0.1-25
C442	87-010-312-080		C-CAP,S 15P-50 CH
C445	87-010-196-080		CHIP CAPACITOR,0.1-25
C446	87-010-196-080		CHIP CAPACITOR,0.1-25
C447	87-010-196-080		CHIP CAPACITOR,0.1-25
C448	87-010-315-080		C-CAP,S 27P-50 CH
C450	87-012-140-080		CAP 470P
C451	87-012-156-080		C-CAP,S 220P-50 CH
C453	87-010-322-080		C-CAP,S 100P-50 CH
C455	87-010-060-080		ELECTROLYTIC 100-16V
C457	87-010-316-080		C-CAP,S 33P-50 CH
C458	87-010-316-080		C-CAP,S 33P-50 CH
C459	87-010-060-080		ELECTROLYTIC 100-16V
C460	87-010-196-080		CHIP CAPACITOR,0.1-25
C461	87-010-196-080		CHIP CAPACITOR,0.1-25
C462	87-A10-505-080		CAP,E 220-6.3 SF
C465	87-015-688-080		CAP,E 4.7-35 7L
C466	87-010-196-080		CHIP CAPACITOR,0.1-25
C467	87-010-060-080		ELECTROLYTIC 100-16V
C468	87-010-322-080		C-CAP,S 100P-50 CH
C469	87-012-154-080		C-CAP,S 150P-50 CH
C475	87-010-197-080		CAP, CHIP 0.01 DM
C476	87-010-236-080		CAP,E 1000-10 SME
C477	87-010-197-080		CAP, CHIP 0.01 DM
C479	87-010-060-080		ELECTROLYTIC 100-16V
C480	87-010-197-080		CAP, CHIP 0.01 DM
C481	87-015-681-080		CAP,E 10-16 7L
C482	87-015-681-080		CAP,E 10-16 7L
C483	87-010-181-080		CAP,CHIP S 1800P
C484	87-010-181-080		CAP,CHIP S 1800P
C490	87-010-196-080		CHIP CAPACITOR,0.1-25
C491	87-015-684-080		CAP,E 47-16 7L
C492	87-015-682-080		CAP,E 22-16 7L
C493	87-010-197-080		CAP, CHIP 0.01 DM
C494	87-010-197-080		CAP, CHIP 0.01 DM
C494	87-010-197-080		CAP, CHIP 0.01 DM
C495	87-010-197-080		CAP, CHIP 0.01 DM
C823	87-010-260-080		CAP, ELECT 47-25V
C824	87-010-260-080		CAP, ELECT 47-25V
C825	87-010-260-080		CAP, ELECT 47-25V
C825	87-010-260-080		CAP, ELECT 47-25V
C826	87-010-260-080		CAP, ELECT 47-25V
C827	87-010-247-080		CAP, ELECT 100-50V
C828	87-010-247-080		CAP, ELECT 100-50V
C851	87-010-404-080		CAP, ELECT 4.7-50V
C4401	87-010-322-080		C-CAP,S 100P-50 CH
C4402	87-010-322-080		C-CAP,S 100P-50 CH
C4403	87-010-322-080		C-CAP,S 100P-50 CH
C4404	87-010-322-080		C-CAP,S 100P-50 CH
C4405	87-010-322-080		C-CAP,S 100P-50 CH
C4410	87-010-196-080		CHIP CAPACITOR,0.1-25
C4411	87-015-681-080		CAP,E 10-16 7L
C4412	87-010-197-080		CAP, CHIP 0.01 DM
CN405	87-009-036-010		CONNECTOR, 8P PH V WHT
CN804	87-009-034-010		CONN,6P PH V
CNA404	8Z-CL5-619-010		CONN ASSY,6P PHR06-170MM JST
CNA407	8Z-CL5-611-010		CONN ASSY,2P RED ZHRAWG28 UL15
CNA408	8Z-CL5-612-010		CONN ASSY,2P BLU ZHRAWG28 UL15
L401	87-005-730-080		COIL,10UH J SP02
L403	S0-035-341-000		BEAD,COIL,100UH
L405	87-005-742-080		COIL,100UH J SP02
L406	S1-212-720-000		BLM21B272SPT
M401	87-A91-069-010		MOT,RF-370CA15370
S401	8Z-CL5-609-010		SW,PUSH 1-1-1 MQS2
S402	8Z-CL5-609-010		SW,PUSH 1-1-1 MQS2
SFR401	87-024-437-080		SFR100K,RH063EC
W401	8Z-CL5-604-010		FF-CABLE, 16P 1.0 100MM
WH402	8Z-CL5-610-010		CONN,16P H WHT 528071610
WH404	87-A60-116-010		CONN,6P H S2M-6WR
WH407	87-009-865-010		CONN,2P ZH BLU
WH408	87-009-863-010		CONN,2P ZH WHT
X401	81-592-641-010		VIB,CER 16.93MHZ

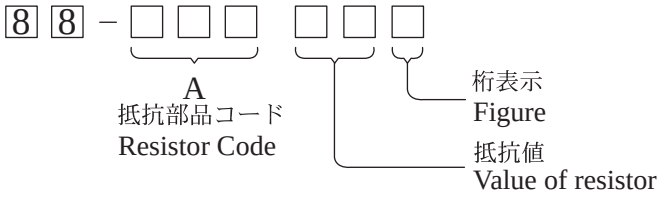
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
CONTROL C.B			
C219	87-010-197-080		CAP, CHIP 0.01 DM
C220	87-010-197-080		CAP, CHIP 0.01 DM
LED206	8Z-CL5-614-010		LED,W03304GSC-SC GR
LED207	8Z-CL5-614-010		LED,W03304GSC-SC GR
LED208	8Z-CL5-614-010		LED,W03304GSC-SC GR
S210	87-036-073-010		TACT SWITCH
S211	87-036-073-010		TACT SWITCH
S212	87-036-073-010		TACT SWITCH
S217	87-036-073-010		TACT SWITCH
S219	87-036-073-010		TACT SWITCH
S220	87-036-073-010		TACT SWITCH
S221	87-036-073-010		TACT SWITCH
S223	87-A90-646-010		SW,RTRY 3-2-1 RE0131
W203	8Z-CL5-603-010		FF-CABLE, 7P 1.0 150MM UL2896
DIGITAL OUT C.B			
C906	87-010-197-080		CAP, CHIP 0.01 DM
C907	87-010-060-080		ELECTROLYTIC 100-16V
LED902	87-A40-558-010		LED,SLZ-8128A-01-A
PT C.B			
C571	87-010-060-080		ELECTROLYTIC 100-16V
C572	87-010-060-080		ELECTROLYTIC 100-16V
C573	87-015-688-080		CAP,E 4.7-35 7L
C574	87-015-688-080		CAP,E 4.7-35 7L
C575	87-015-688-080		CAP,E 4.7-35 7L
C576	87-015-688-080		CAP,E 4.7-35 7L
C577	87-010-176-080		C-CAP,S 680P-50 SL
C578	87-010-176-080		C-CAP,S 680P-50 SL
C579	87-010-318-080		C-CAP,S 47P-50 CH
C580	87-010-318-080		C-CAP,S 47P-50 CH
C581	87-012-154-080		C-CAP,S 150P-50 CH
C582	87-012-154-080		C-CAP,S 150P-50 CH
C583	87-015-695-080		CAP,E 1-50 7L
C584	87-015-695-080		CAP,E 1-50 7L
C587	87-015-695-080		CAP,E 1-50 7L
C588	87-015-695-080		CAP,E 1-50 7L
C881	87-A10-479-080		CAP,CER 2200P-250 M E KH
C883	87-015-697-080		CAP,E 3.3-50 7L
C884	87-010-387-080		CAP,E 470-25 SME
⚠FR881	S0-063-200-000		FUSE,63MA,250V
J501	8Z-CL5-608-010		JACK,PIN 6P VERTICAL
⚠P1	87-A60-317-010		TERMINAL, 1P MSC
⚠P2	87-A60-317-010		TERMINAL, 1P MSC
⚠PT881	8Z-CL5-681-010		PT,U L6636EI-66/36
⚠PT882	8Z-NF8-662-010		PT,SUB ZNF-8(E)
⚠RL881	87-A90-976-010		RELAY,AC12V SDT-S-112LMR
TUNER C.B			
C701	87-010-381-080		CAP, ELECT 330-16V
C702	87-010-404-080		CAP, ELECT 4.7-50V
C703	87-012-286-080		CAP, U 0.01-25
C704	87-012-286-080		CAP, U 0.01-25
C709	87-012-195-080		C-CAP,U 100P-50CH
C711	87-010-260-080		CAP, ELECT 47-25V
C712	87-010-831-080		C-CAP,U,0.1-16F
C713	87-012-286-080		CAP, U 0.01-25
C714	87-012-286-080		CAP, U 0.01-25
C715	87-012-195-080		C-CAP,U 100P-50CH
C717	87-012-286-080		CAP, U 0.01-25
C719	87-012-286-080		CAP, U 0.01-25
C720	87-012-195-080		C-CAP,U 100P-50CH
C721	87-012-176-080		CAP 15P
C722	87-012-176-080		CAP 15P
C723	87-012-274-080		CHIP CAP,U 1000P-50B
C725	87-018-131-080		CAP, CER 1000P-50V
C727	87-010-196-080		CHIP CAPACITOR,0.1-25
C728	87-010-248-080		CAP, ELECT 220-10V
C729	87-012-274-080		CHIP CAP,U 1000P-50B
C731	87-012-286-080		CAP, U 0.01-25
C733	87-012-280-080		CAP, U 3300P-50
C734	87-012-280-080		CAP, U 3300P-50
C752	87-012-282-080		CAP, U 4700P-50
C753	87-012-195-080		C-CAP,U 100P-50CH
C755	87-012-286-080		CAP, U 0.01-25
C756	87-012-286-080		CAP, U 0.01-25
C757	87-012-188-080		C-CAP,U 47P-50 CH
C758	87-012-167-080		C-CAP,U 5P-50 CH
C761	87-010-196-080		CHIP CAPACITOR,0.1-25
C762	87-012-286-080		CAP, U 0.01-25
C763	87-010-829-080		CAP, U 0.047-16
C765	87-012-286-080		CAP, U 0.01-25
C766	87-010-197-080		CAP, CHIP 0.01 DM
C768	87-012-286-080		CAP, U 0.01-25
C769	87-010-260-080		CAP, ELECT 47-25V
C770	87-010-829-080		CAP, U 0.047-16
C771	87-010-383-080		CAP, ELECT 33-25V
C772	87-010-829-080		CAP, U 0.047-16
C773	87-010-196-080		CHIP CAPACITOR,0.1-25
C774	87-010-263-080		CAP, ELECT 100-10V
C775	87-010-404-080		CAP, ELECT 4.7-50V
C776	87-012-286-080		CAP, U 0.01-25
C777	87-010-493-080		CAP,E 0.47-50 GAS
C778	87-010-401-080		CAP, ELECT 1-50V
C779	87-010-401-080		CAP, ELECT 1-50V
C780	87-010-196-080		CHIP CAPACITOR,0.1-25
C781	87-010-405-080		CAP, ELECT 10-50V
C782	87-010-405-080		CAP, ELECT 10-50V
C783	87-012-286-080		CAP, U 0.01-25
C784	87-012-286-080		CAP, U 0.01-25
C785	87-010-405-080		CAP, ELECT 10-50V
C786	87-010-405-080		CAP, ELECT 10-50V
C787	87-012-275-080		C-CAP,U 1200P-50 B
C788	87-012-275-080		C-CAP,U 1200P-50 B
C789	87-012-275-080		C-CAP,U 1200P-50 B
C790	87-012-275-080		C-CAP,U 1200P-50 B
C791	87-010-405-080		CAP, ELECT 10-50V
C793	87-012-273-080		C-CAP,U 820P-50 B
C794	87-010-406-080		CAP, ELECT 22-50
C795	87-010-596-080		CAP, S 0.047-16
C796	87-010-403-080		CAP, ELECT 3.3-50V
C797	87-012-276-080		CAP, CHIP SS 1500 PBK
C798	87-012-276-080		CAP, CHIP SS 1500 PBK
C799	87-010-829-080		CAP, U 0.047-16
C812	87-012-286-080		CAP, U 0.01-25
C814	87-012-286-080		CAP, U 0.01-25
C820	87-010-260-080		CAP, ELECT 47-25V
C821	87-012-286-080		CAP, U 0.01-25
C822	87-012-286-080		CAP, U 0.01-25
C823	87-012-286-080		CAP, U 0.01-25
C828	87-010-196-080		CHIP CAPACITOR,0.1-25
C829	87-010-196-080		CHIP CAPACITOR,0.1-25
C859	87-012-286-080		CAP, U 0.01-25<EZ>
C861	87-012-199-080		CAP 220P<EZ>
C862	87-012-199-080		CAP 220P<EZ>
C863	87-012-270-080		CAP, U 470P-50<EZ>
C864	87-010-405-080		CAP, ELECT 10-50V<EZ>
C865	87-010-196-080		CHIP CAPACITOR,0.1-25<EZ>
C866	87-010-405-080		CAP, ELECT 10-50V<EZ>
C867	87-012-286-080		CAP, U 0.01-25<EZ>
C868	87-012-184-080		C-CAP,U 33P-50 CH<EZ>
C869	87-012-180-080		C-CAP,U 22P-50 CH<EZ>
C940	87-012-286-080		CAP, U 0.01-25
C942	87-012-168-080		C-CAP,U 6P-50 CH
C947	87-012-286-080		CAP, U 0.01-25

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C949	87-A10-039-080		C-CAP,U 470P-50 J CH
C952	87-012-286-080		CAP, U 0.01-25
C958	87-010-197-080		CAP, CHIP 0.01 DM
C959	87-010-831-080		C-CAP,U,0.1-16F
C960	87-010-196-080		CHIP CAPACITOR,0.1-25
C962	87-010-401-080		CAP, ELECT 1-50V
CF801	87-008-423-010		CERAMIC FILTER, SFE10.7
CF802	82-785-747-010		CF MS2 GHY R
CN701	87-A60-700-010		CONN,13P H GRY TUC-P13X-C1<K>
CN701	87-A60-650-010		CONN,16P H GRY TUC-P16X-C1<EZ>
FFE801	A8-6ZA-191-130		6ZA-1 FEENM
J801	87-033-241-010		TERMINAL,ANT AJ-2039
L771	87-A50-266-010		COIL,FM DET-2N(TOK)
L772	87-A91-110-010		FLTR,PCFJZH-450 (TOK)
L781	87-005-847-080		COIL,2.2UH(CECS)
L791	87-A50-027-010		COIL,1 POLE MPX(TOK)
L792	87-A50-027-010		COIL,1 POLE MPX(TOK)
L832	87-005-847-080		COIL,2.2UH(CECS)
L851	87-005-847-080		COIL,2.2UH(CECS)<EZ>
L941	87-A50-020-010		COIL,ANT LW(COI)
L942	87-A50-019-010		COIL,OSC LW(COI)
L981	8Z-ZA1-665-010		COIL,AM PACK 2(TOK)
TC942	87-011-164-010		CAPACITOR,TRIMMER 30P
X721	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
X851	87-A70-091-010		VIB,XTAL 4.332MHZ CSA-309<EZ>

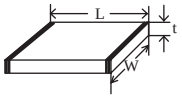
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

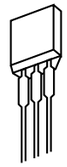
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

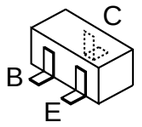
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード ：A Resistor Code：A
1/16W	1005	±5%	CJ		1.0	0.5	0.35	104
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION



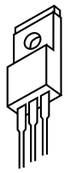
ECB

2SA933



2SA1162
2SC2712
DTA114YK
DTA144EK

DTC114EK
DTC114TK
DTC114YK



BCE

2SB1370

ECB

2SC1815

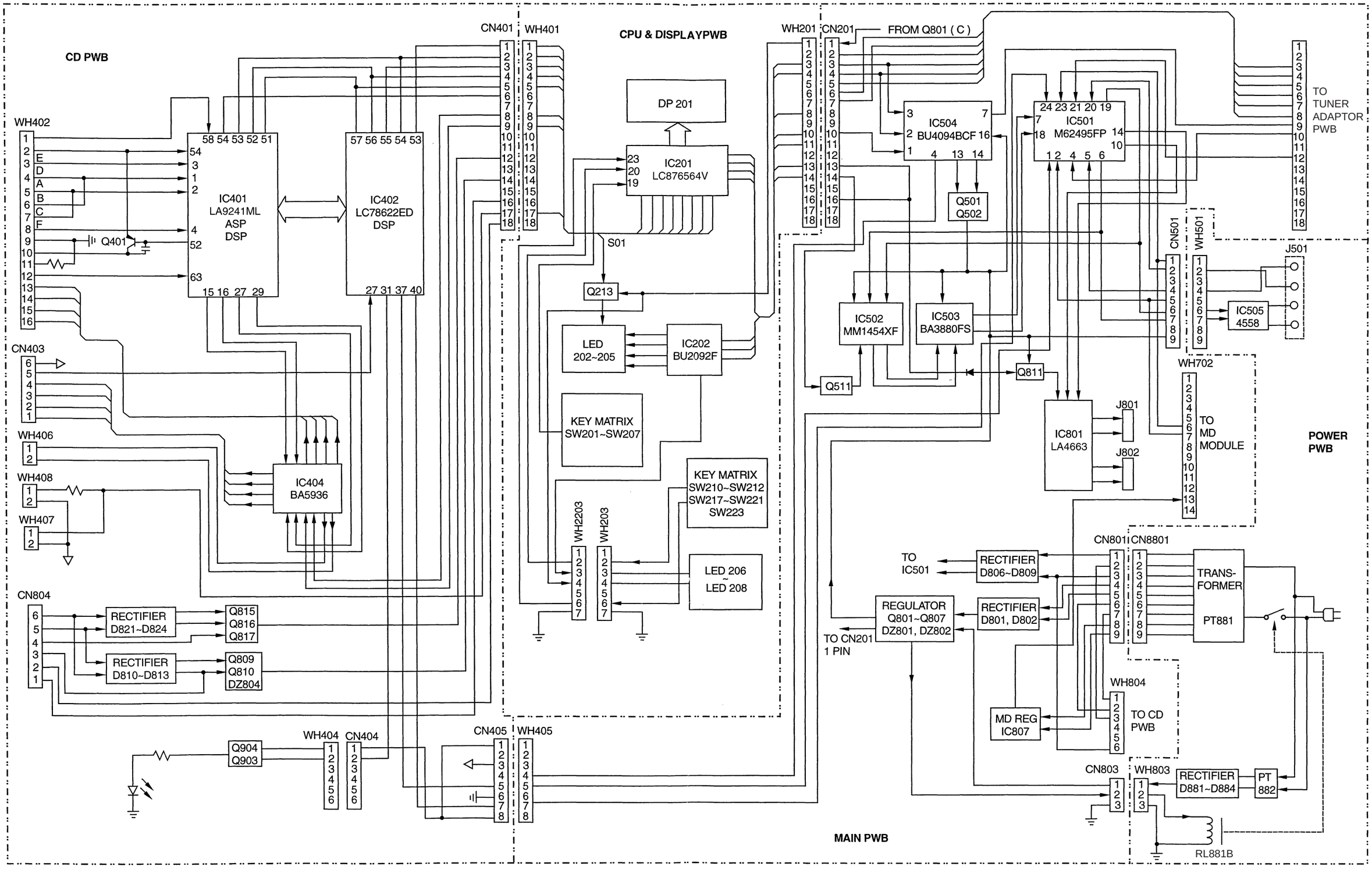
ECB

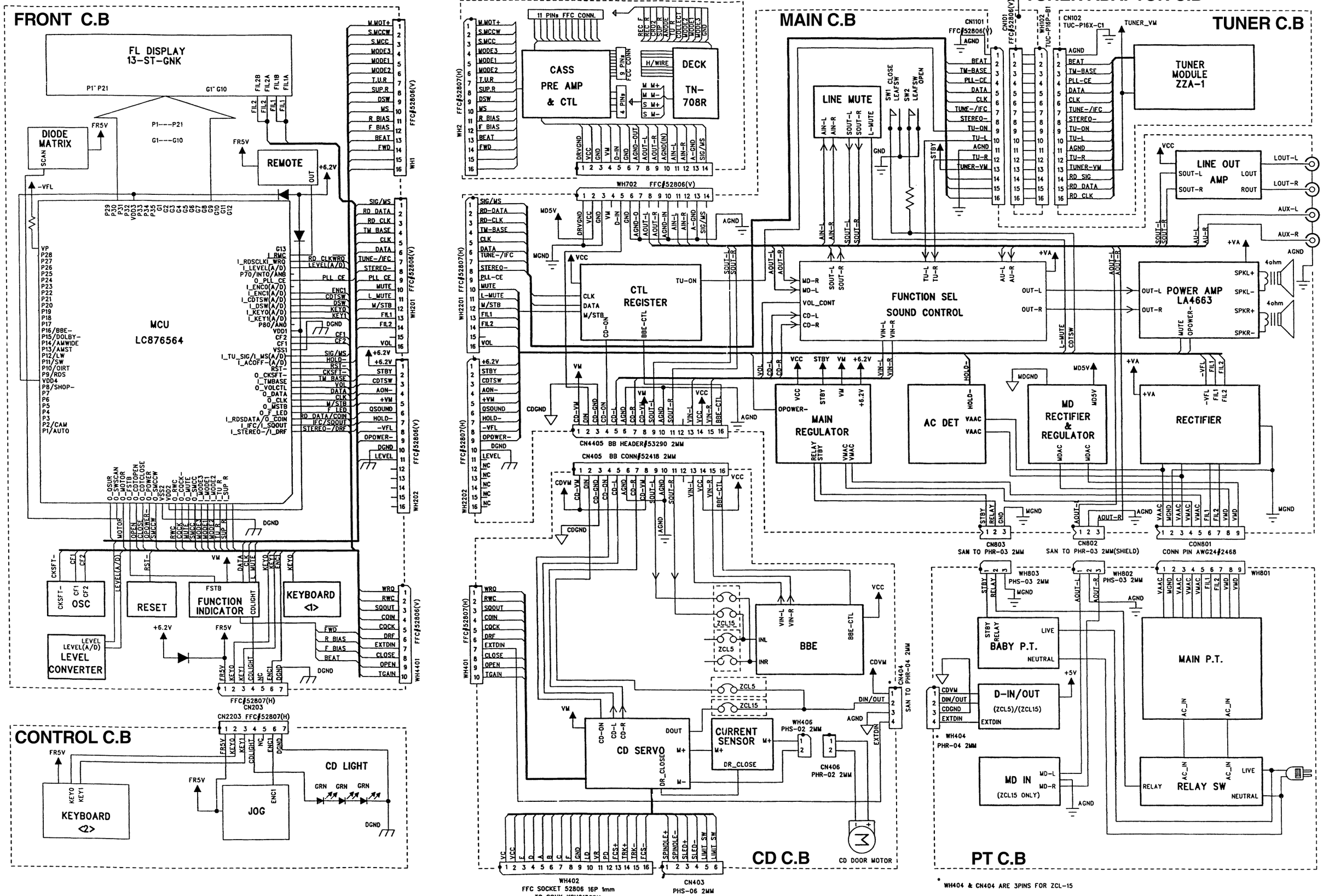
PE8050
PE8550

FL (13-ST-36GNAK) GRID ASSIGNMENT/ANODE CONNECTION

| ANODE CONNECTION | | 13G | 12G~2G | 1G | | |

BLOCK DIAGRAM-1




FRONT C.B
FL DISPLAY
13-ST-GNK
DIODE MATRIX
REMOTE
MCU
LC876564
OSC
RESET
FUNCTION INDICATOR
KEYBOARD <1>
LEVEL CONVERTER
CONTROL C.B
KEYBOARD <2>
JOG
CD LIGHT
TUNER ADAPTOR C.B
MAIN C.B
TUNER C.B
CASS PRE AMP & CTL
DECK TN-708R
LINE MUTE
TUNER MODULE ZZA-1
LINE OUT AMP
POWER AMP LA4663
CTL REGISTER
FUNCTION SEL SOUND CONTROL
MAIN REGULATOR
AC DET
MD RECTIFIER & REGULATOR
RECTIFIER
CD C.B
CD SERVO
CURRENT SENSOR
BBE
CD DOOR MOTOR
PT C.B
BABY P.T.
MAIN P.T.
D-IN/OUT
MD IN
RELAY SW

MAIN C. B

TO/FROM CD C.B CN405

TO/FROM PT C.B WH501

TO/FROM FRONT C.B WH201

EZ MODEL

TO/FROM FRONT C.B WH204

TO/FROM CD C.B CN804

TO/FROM PT C.B CN8801

TUNER ADAPTOR C. B

EZ MODEL

TO/FROM TUNER C.B CN701

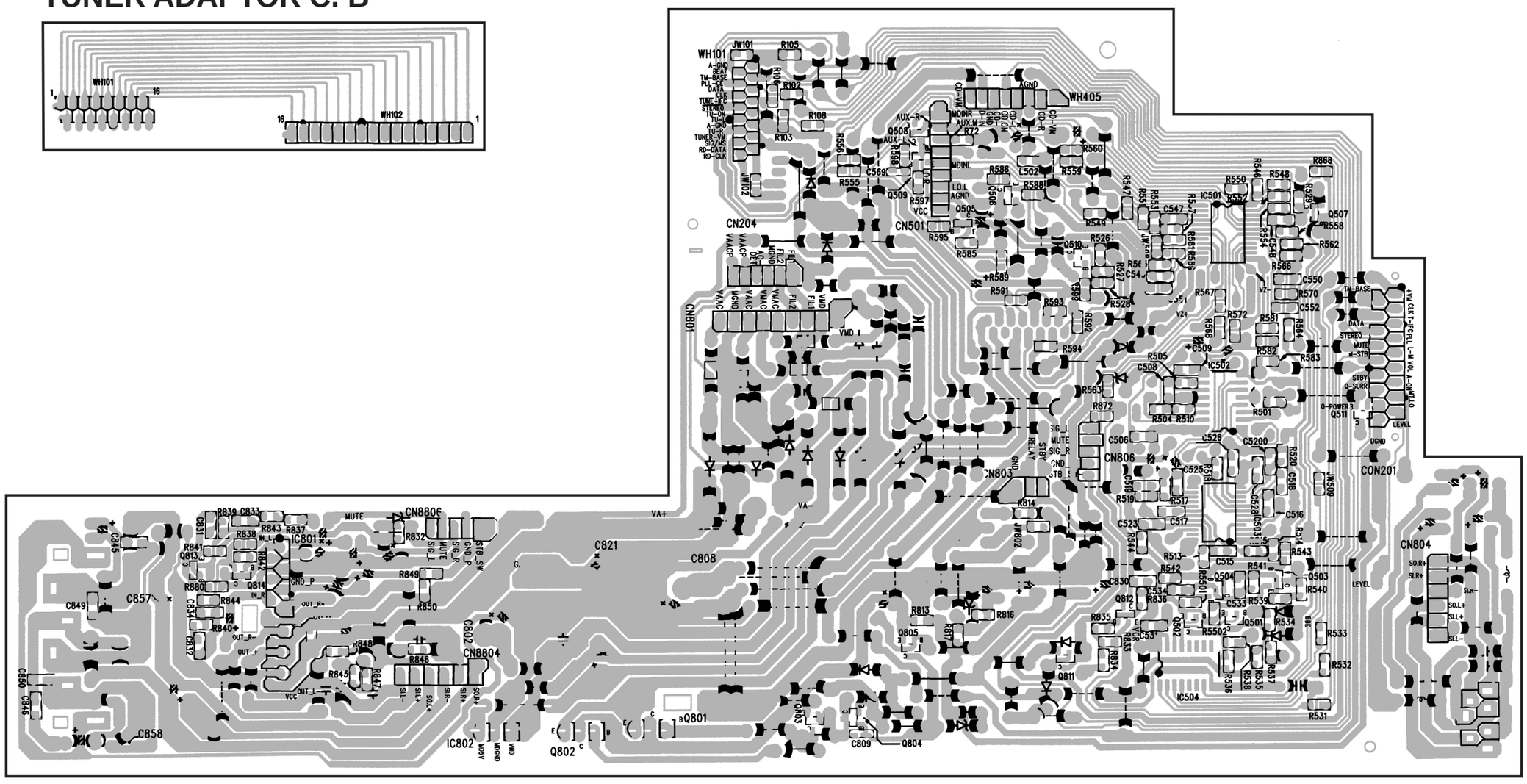
J801
PHONES

CN803

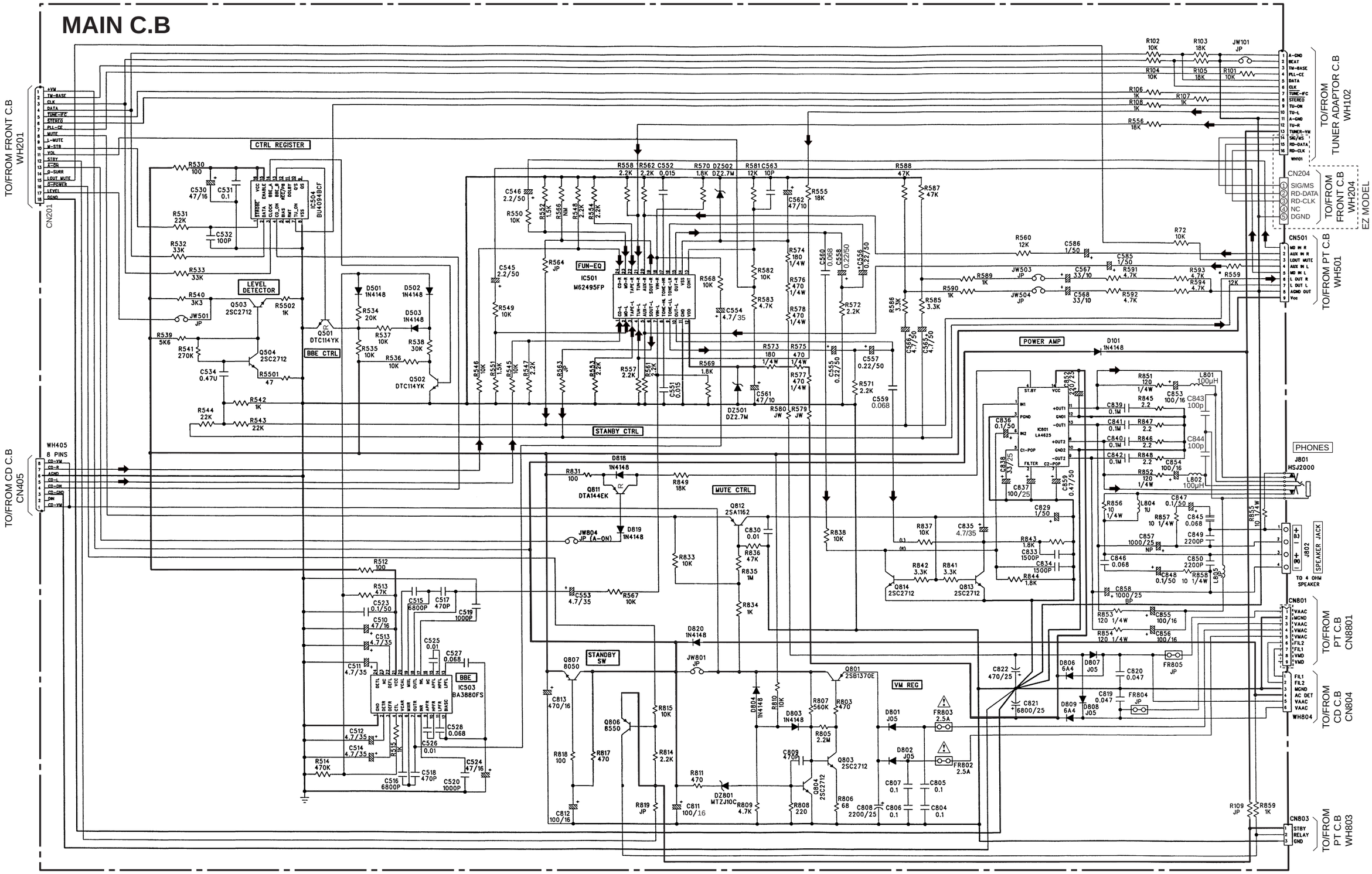
TO/FROM PT C.B WH803

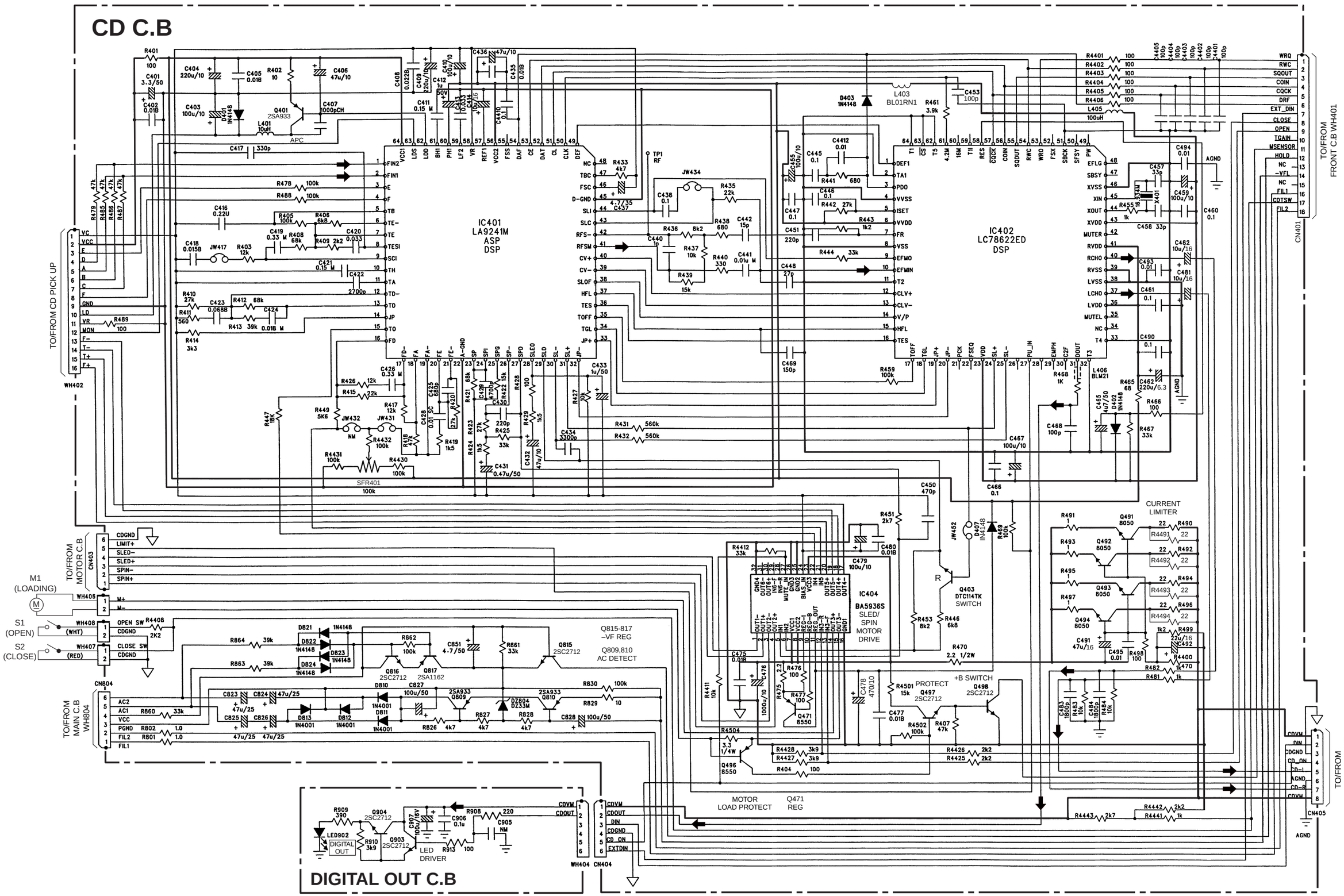
TUNER ADAPTOR C. B

MAIN C. B

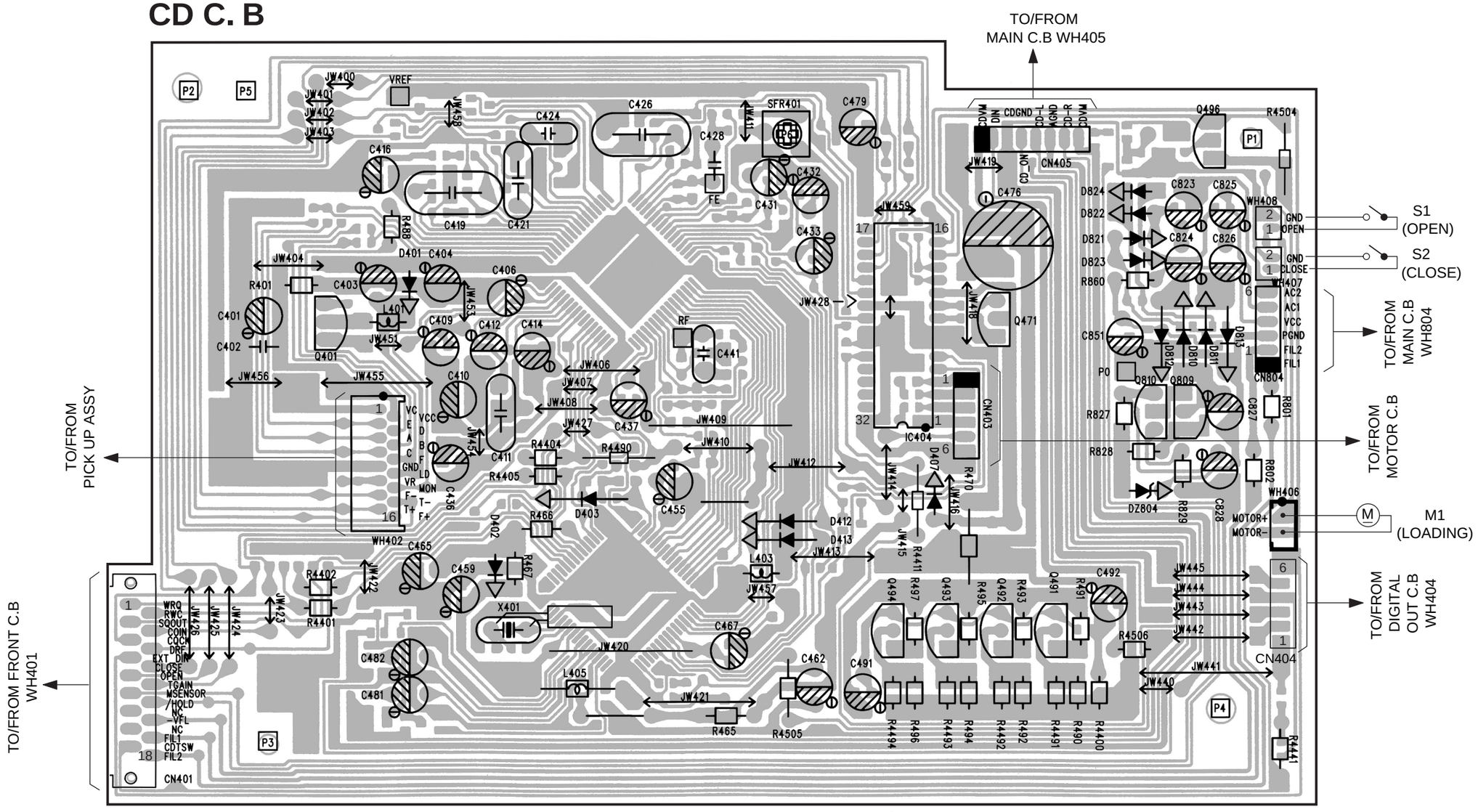


SCHEMATIC DIAGRAM-1 (MAIN)

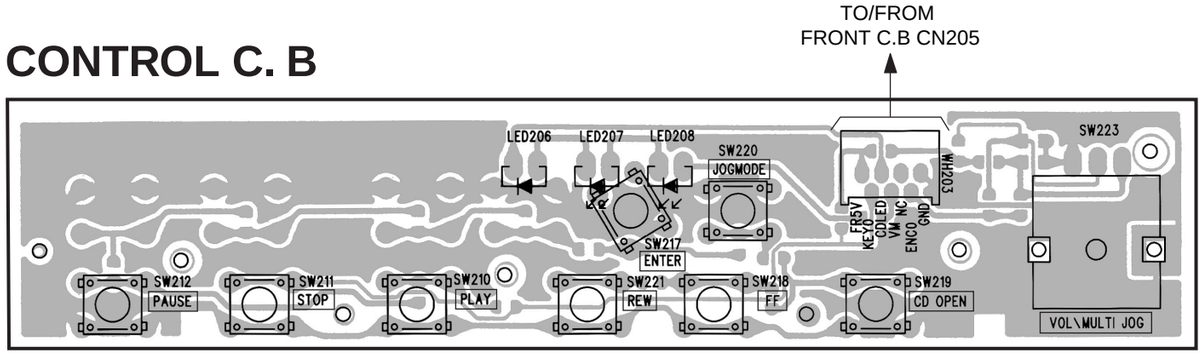



CD C.B
IC401
LA9241M
ASP
DSP
IC402
LC78622ED
DSP
IC404
BA5936S
SLED/
SPIN
MOTOR
DRIVE
APC
SFR401
100k
CURRENT
LIMITER
PROTECT
+B SWITCH
MOTOR
LOAD PROTECT
Q471
REG
Q815-817
–VF REG
Q809,810
AC DETECT
LED
DRIVER
DIGITAL OUT C.B
TO/FROM CD PICK UP
WH402
TO/FROM MOTOR C.B
CN403
TO/FROM MAIN C.B
WH804
CN804
M1
(LOADING)
S1
(OPEN)
S2
(CLOSE)
TO/FROM
FRONT C.B WH401
CN401
TO/FROM
MAIN C.B WH405
CN405
WH404
CN404

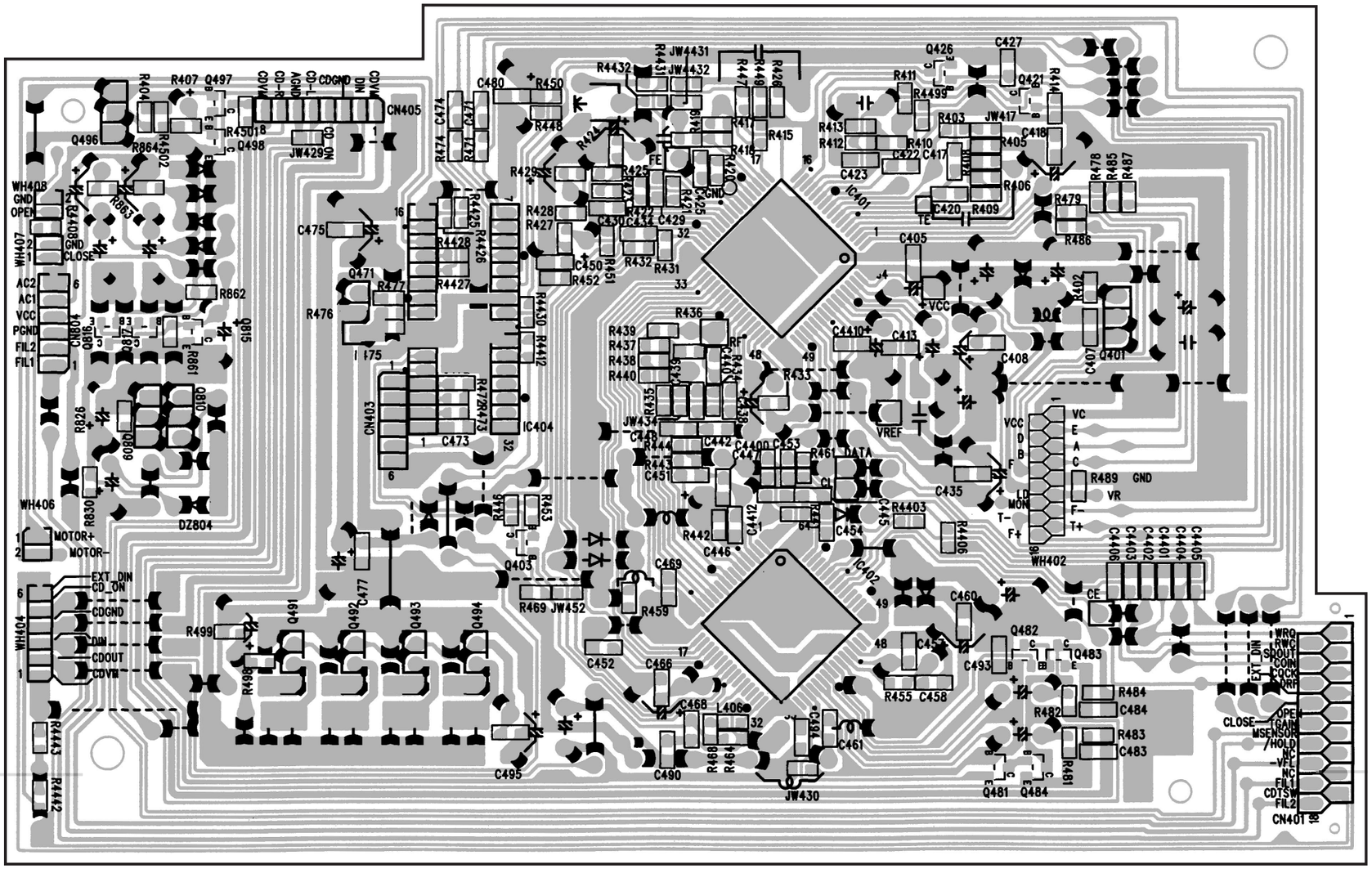
CD C. B



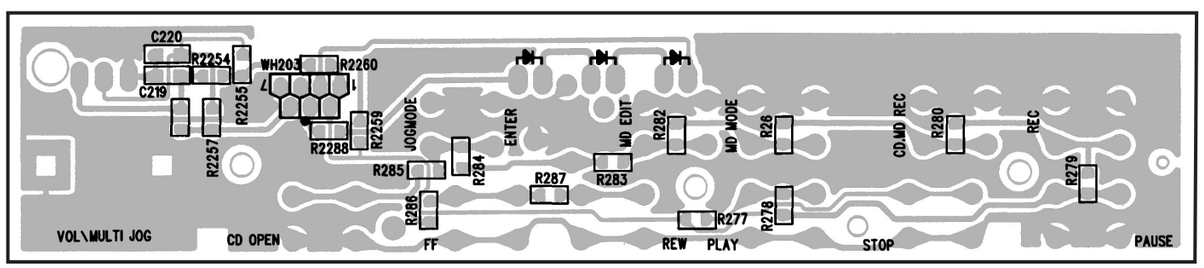
CONTROL C. B



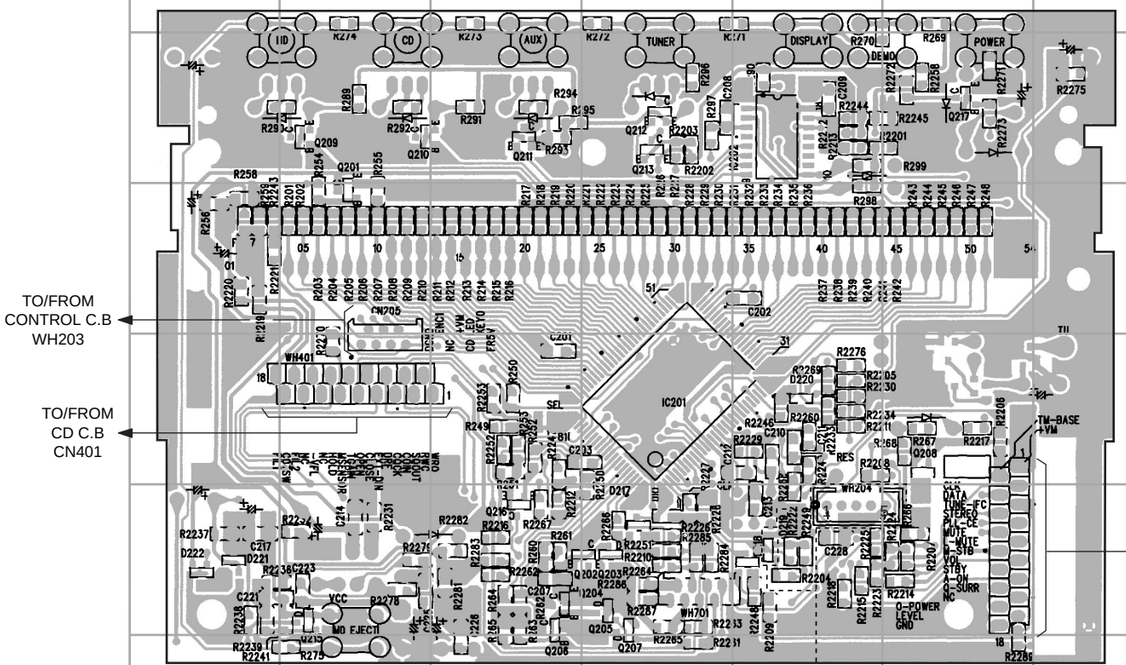
CD C. B



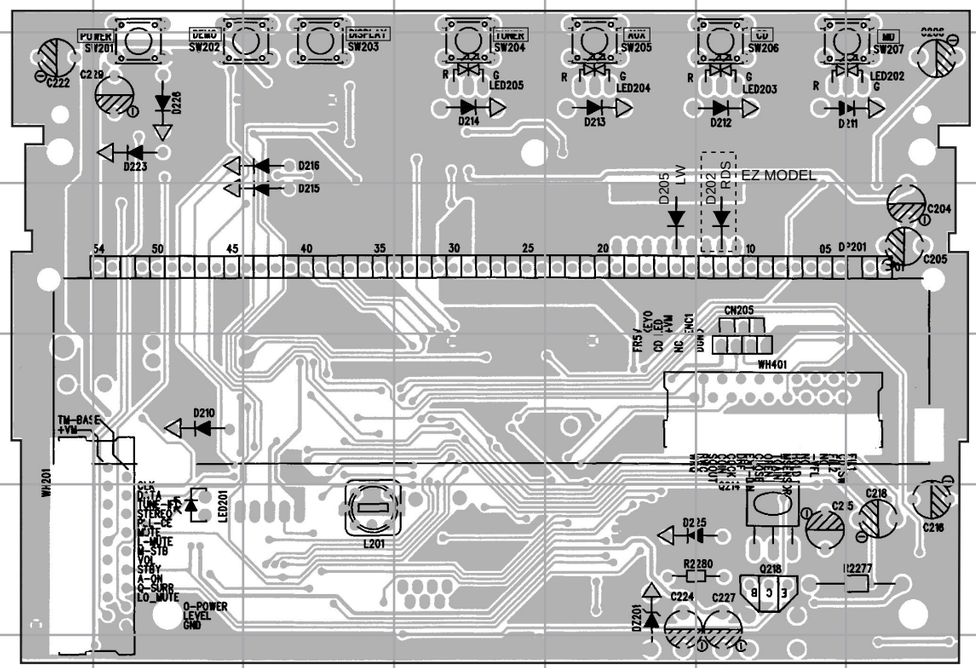
CONTROL C. B



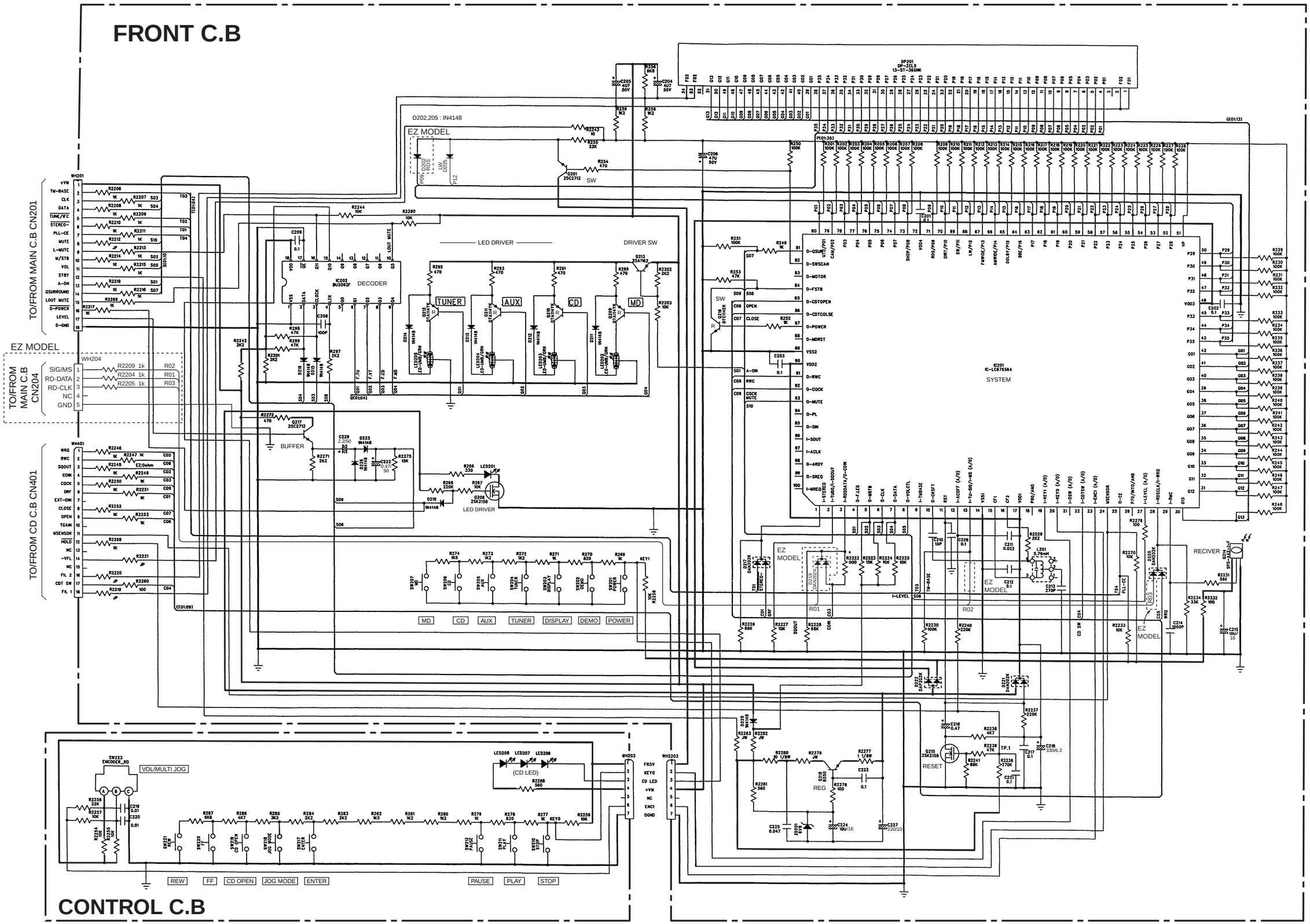
FRONT C.B (CONDUCTOR SIDE)



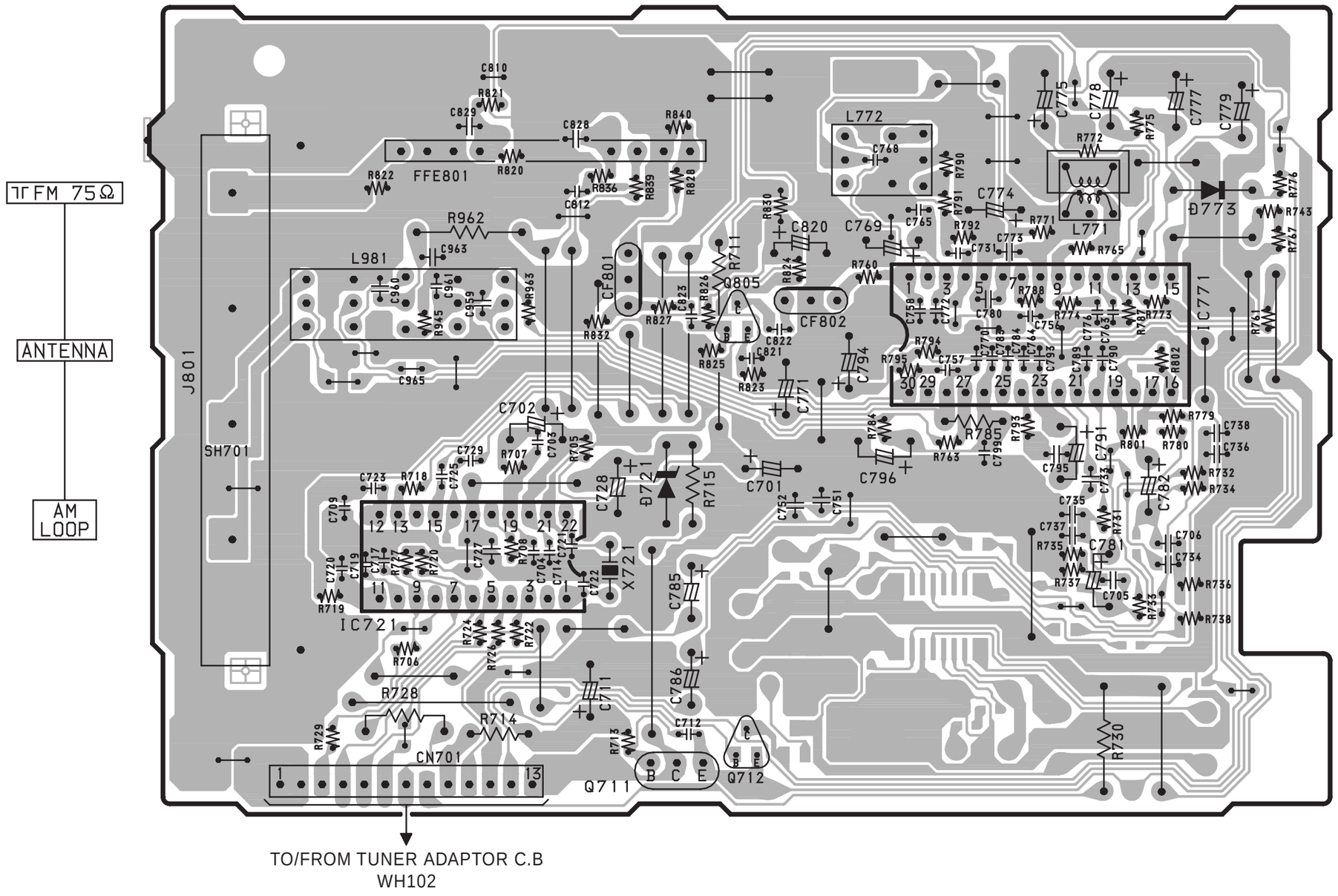
FRONT C.B (COMPONENT SIDE)



FRONT C.B


TO/FROM MAIN C.B CN201
TO/FROM MAIN C.B CN204
TO/FROM CD C.B CN401
EZ MODEL
D202,205 : IN4148
LED DRIVER
DRIVER SW
TUNER
AUX
CD
MD
DECODER
IC202 BU2923F
IC201 IC-LC676564 SYSTEM
SW
BUFFER
LED DRIVER
RECIVER
REG
RESET
MD
CD
AUX
TUNER
DISPLAY
DEMO
POWER
VOL/MULTI JOG
(CD LED)
REW
FF
CD OPEN
JOG MODE
ENTER
PAUSE
PLAY
STOP
CONTROL C.B

TUNER C.B


FM 75Ω
ANTENNA
AM LOOP
J801
SH701
FFE801
L981
CF801
CF802
Q805
L772
L771
D773
IC771
C775
C778
C777
C779
C774
C769
C820
R962
C963
R711
R772
R775
R776
R743
R767
R761
R765
R760
R788
R774
R773
R787
R802
R794
R795
R757
C794
C796
C771
C702
C703
C705
C707
C729
C723
R718
C725
C728
D721
R715
C701
C752
C751
C785
C786
C711
X721
IC721
C709
C717
C719
C720
C727
C704
C714
C721
C722
R719
R720
R727
R708
R706
R724
R722
R728
R714
R729
R713
C712
Q711
Q712
CN701
C781
C782
C791
C795
C738
C736
C735
C737
C734
C706
R779
R780
R801
R763
R785
R784
R793
R732
R734
R731
R736
R738
R733
R730
C810
R821
C829
C828
R840
R820
R822
R836
R839
R828
C812
R830
R824
R826
R823
R827
R832
C822
C821
R825
C965
C960
C961
C959
R945
R963
C758
C772
C780
C756
C770
C784
C764
C793
C789
C776
C763
C790
R802
C757
C731
R792
R791
R790
C765
R771
C773
R796
R797
R798
R799
R800
R803
R804
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R811
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R815
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R818
R819
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R821
R822
R823
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R826
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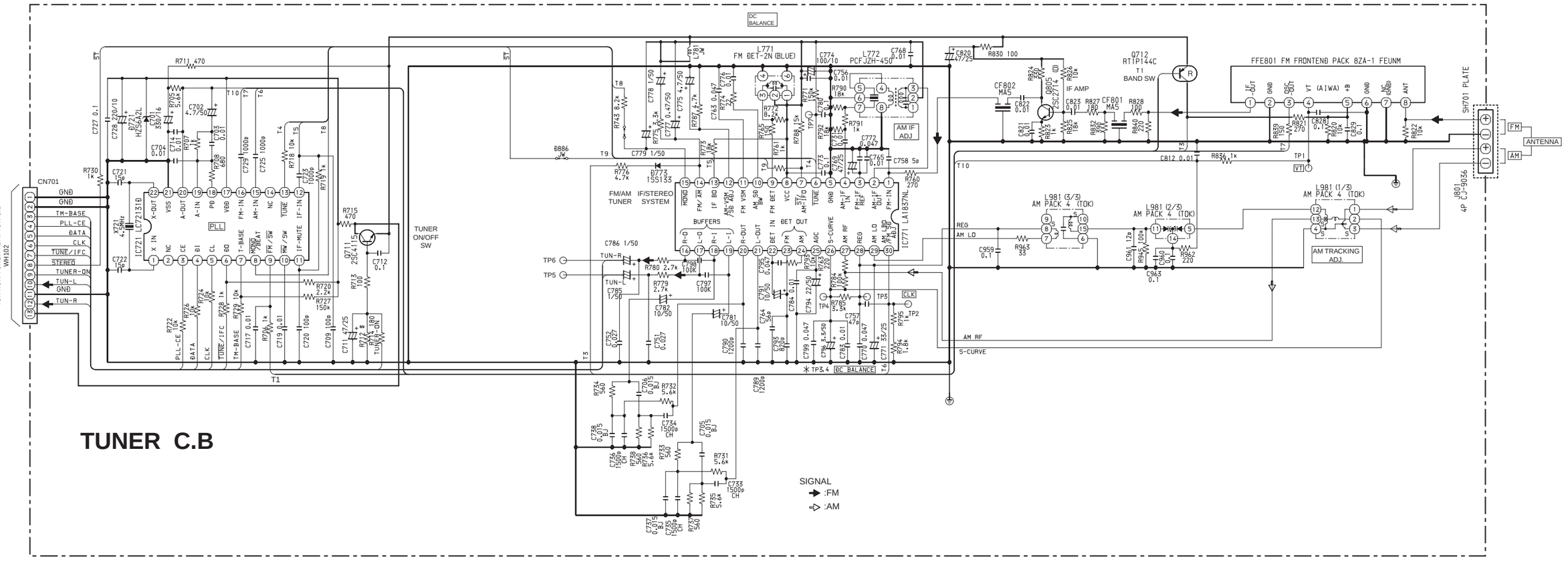
R828
R829
R830
R831
R832
R833
R834
R835
R836
R837
R838
R839
R840
R841
R842

SCHEMATIC DIAGRAM-4 (TUNER)



PT C. B

J502

L R

MD IN

AUX IN

LINE OUT

TO/FROM MAIN C. B
CN501

TO/FROM MAIN C. B
CN803

TO/FROM MAIN C. B
CN801

CN8801
9 VMD
VMD
FIL2
FIL1
VMAC
VMAC
VAAC
MGND
1 VAAC

C574 MUTE C573 C575 IC505 C584 JW885 C576 C572 C577 C587 C583 C588 C883 C884 Q802 D887 R882 GND ST/BY VCC WH803 D885 D886 D884 D881 D882 D883 WH501 J502 L501 MUTE

PT882

RL881

FR881

C881

T63mAL 250V

LIVE

NEUTRAL

JW883

AC

PT881

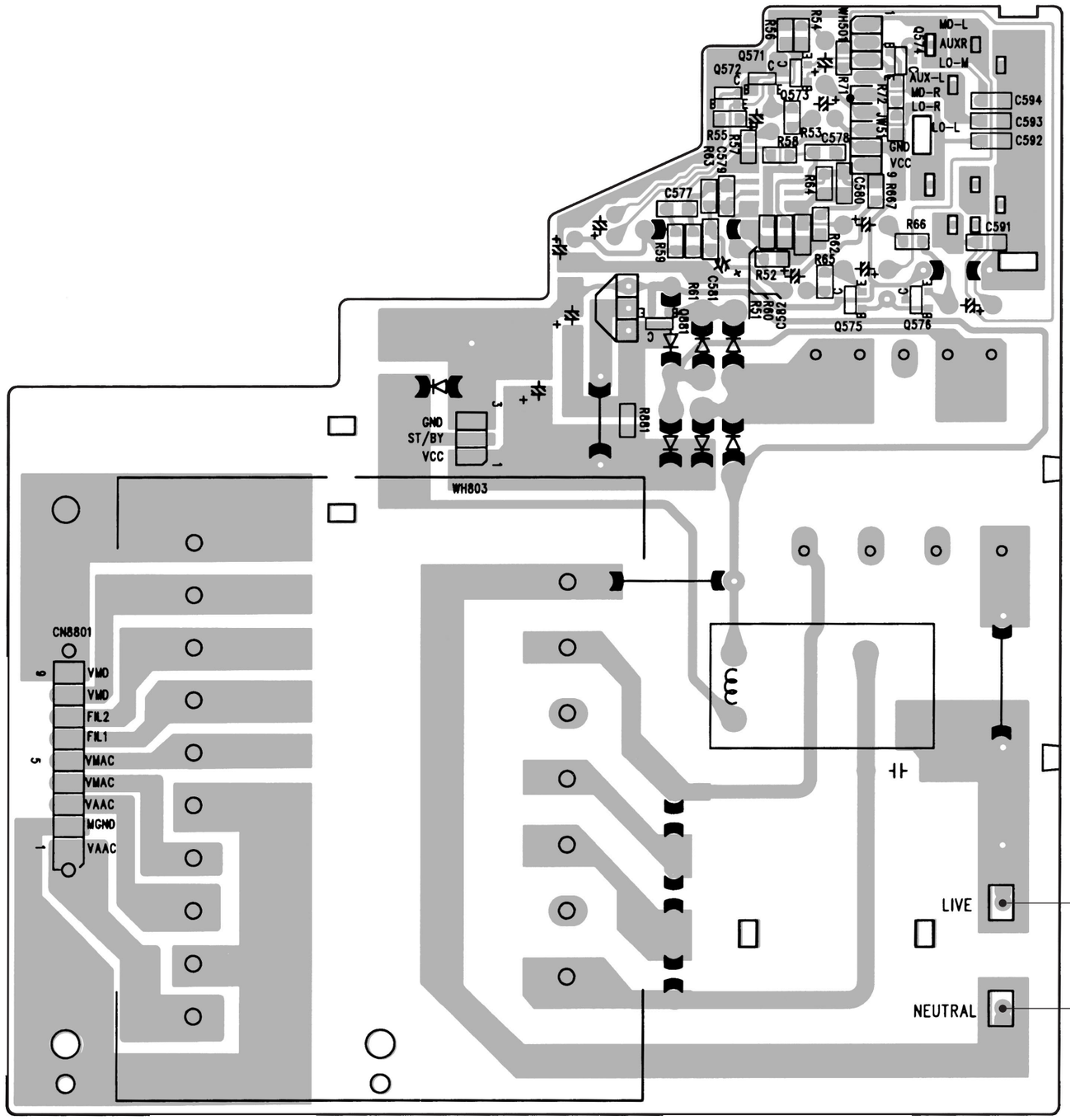
DIGITAL OUT C. B

CDVM
DOUT
DIN
CDGND
CDON
EXTDIN
WH404
C907
LED902

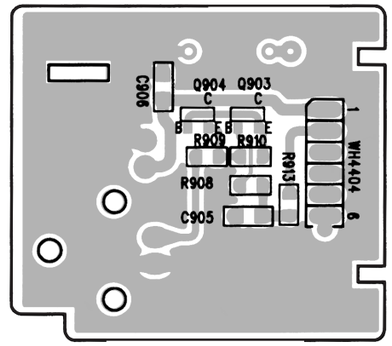
TO/FROM
CD C. B
CN404

LED902
DIGITAL
OUT

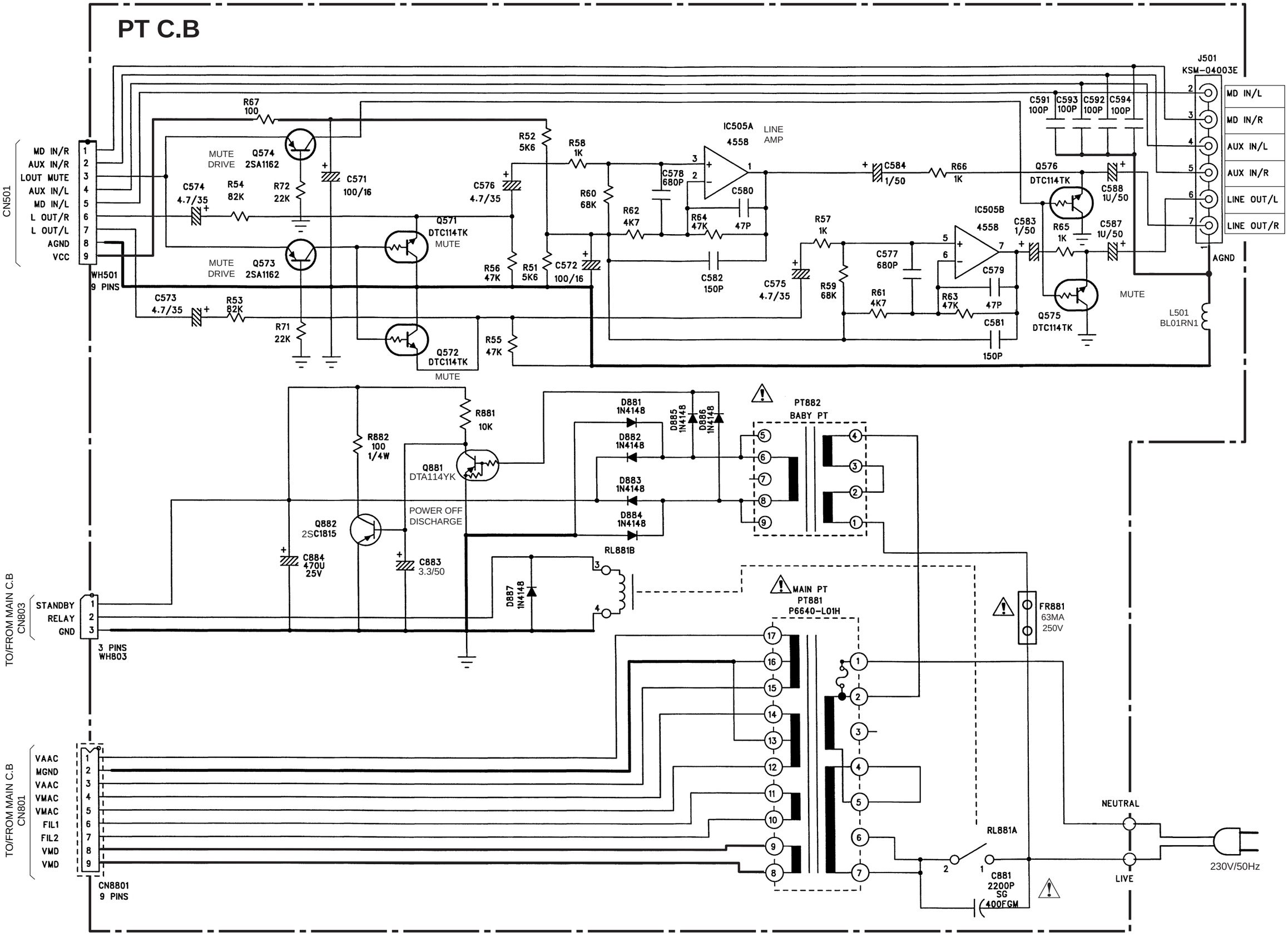
PT C. B



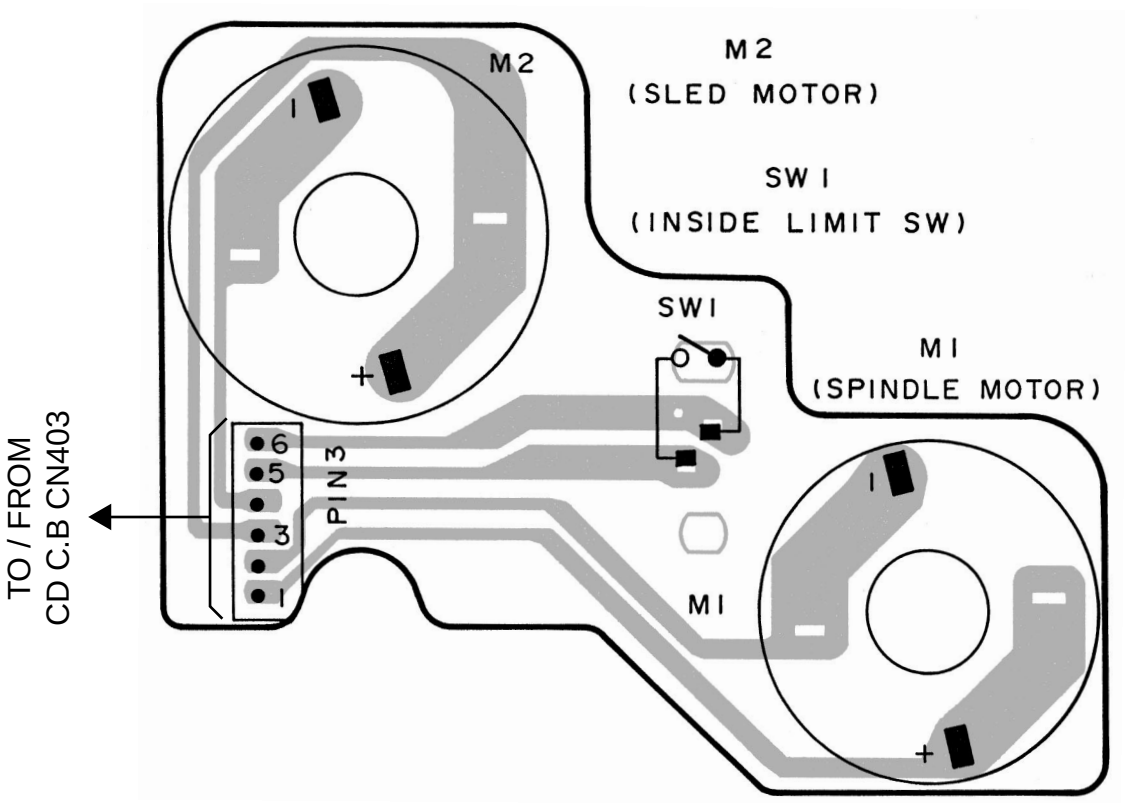
DIGITAL OUT C. B



SCHEMATIC DIAGRAM-5 (PT)



MOTOR C.B


M2
(SLED MOTOR)
SW I
(INSIDE LIMIT SW)
SWI
MI
(SPINDLE MOTOR)
M2
MI
PIN 3
6
5
3
1
TO / FROM
CD C.B CN403

VOLTAGE CHART

THE MEASURED VALUE IS DC VOLTAGE
UNIT: V
CD SECTION
TEST CONDITION: CD PLAY

IC401 LA9241M

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
	2.62	2.62	2.62	2.63	2.59	2.62	2.61	2.62	2.61	2.61	2.61	2.60
PIN'S NUMBER	13	14	15	16	17	18	19	20	21	22	23	24
	2.54	2.61	2.65	2.73	2.62	2.56	2.62	2.44	2.62	0	2.61	2.61
PIN'S NUMBER	25	26	27	28	29	30	31	32	33	34	35	36
	2.60	2.62	2.71	2.62	2.75	2.56	2.57	0	0	4.98	0	0
PIN'S NUMBER	37	38	39	40	41	42	43	44	45	46	47	48
	0	0	0	0.37	2.62	2.55	2.72	2.60	0	2.61	0	0
PIN'S NUMBER	49	50	51	52	53	54	55	56	57	58	59	60
	0	2.55	4.43	5.35	0	4.89	0.18	5.07	2.62	2.62	2.96	3.00
PIN'S NUMBER	61	62	63	64								
	2.32	3.85	0.27	5.07								

IC402 LC78622ED

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
	0	0	1.63	0	2.04	5.05	0.42	0	2.59	2.73	0	0.37
PIN'S NUMBER	13	14	15	16	17	18	19	20	21	22	23	24
	0	0	0.10	0.34	0	4.98	0	0	2.48	4.98	4.99	0
PIN'S NUMBER	25	26	27	28	29	30	31	32	33	34	35	36
	0	1.80	5.02	1.73	0	0	2.52	0	0	0	0	4.92
PIN'S NUMBER	37	38	39	40	41	42	43	44	45	46	47	48
	2.15	0	0	2.14	4.93	0	4.99	2.20	2.19	0	0.18	0
PIN'S NUMBER	49	50	51	52	53	54	55	56	57	58	59	60
	0.18	2.53	0	2.53	1.72	0	0.37	5.36	4.44	4.96	0	2.49
PIN'S NUMBER	61	62	63	64								
	2.42	0	0	0								

IC404 BA5936S

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
	3.15	3.22	2.73	3.54	2.59	2.59	6.74	6.74	6.39	5.78	5.04	0
PIN'S NUMBER	13	14	15	16	17	18	19	20	21	22	23	24
	0	3.42	3.39	0	3.07	3.15	2.80	3.39	2.59	2.59	6.78	2.59
PIN'S NUMBER	25	26	27	28	29	30	31	32				
	0	0	6.82	0	0	3.46	3.45	0				

TRANSISTOR	Q815(C2712)			Q816(A1162)			Q817(C2712)		
	E	C	B	E	C	B	E	C	B
	0	3.42	0	0	0	0.65	0	0	0.63

TRANSISTOR	Q809(2SA933)			Q810(2SA933)		
	E	C	B	E	C	B
	-32.8	-33.4	-33.5	-31.2	-33.0	-32.0

CPU SECTION
TEST CONDITION: CD PLAY

IC201 LC876572V

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
CD PLAY	4.35	0	5.42	0.10	0	0.09	0.1	0	5.42	0.26	5.33	3.34
PIN'S NUMBER	13	14	15	16	17	18	19	20	21	22	23	24
CD PLAY	0	0	2.73	2.76	5.45	0	5.51	5.51	0	0	0	0
PIN'S NUMBER	25	26	27	28	29	30	31	32	33	34	35	36
CD PLAY	0	0	/	1.62	5.23	/	/	/	/	/	/	/
PIN'S NUMBER	37	38	39	40	41	42	43	44	45	46	47	48
CD PLAY	/	/	/	/	/	/	/	/	/	/	/	/
PIN'S NUMBER	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	/	/	/	/	/	/	/	/	/	/	/	/
PIN'S NUMBER	61	62	63	64	65	66	67	68	69	70	71	72
CD PLAY	/	/	/	/	/	/	/	/	/	/	/	/
PIN'S NUMBER	73	74	75	76	77	78	79	80	81	82	83	84
CD PLAY	/	/	/	/	/	/	/	/	0	-30.1	0	0
PIN'S NUMBER	85	86	87	88	89	90	91	92	93	94	95	96
CD PLAY	0	0	5.39	5.37	0	5.45	0	4.51	0	0	0	0
PIN'S NUMBER	97	98	99	100								
CD PLAY	5.52	5.37	5.37	5.52								

IC202 BU2092

PIN'S NUMBER	1	2	3	4	5	6	7	8	9
TUNER	0	0.59	0.58	0	0	0	2.91	2.89	2.89
CD PLAY	0	0.58	0.58	0	0	2.99	2.90	0	2.89
PIN'S NUMBER	10	11	12	13	14	15	16	17	18
FM	0	0	0	0	0	0.39	0	0	5.72
CD PLAY	0	0	0	0	0	0.40	0	0	6

MAIN SECTION
TEST CONDITION: TUNER ON OR CD PLAY

IC504 BU4094

PIN'S NUMBER	1	2	3	4	5	6	7	8
BBE ON	0	0	0	0	0	0	10.94	0
BBE OFF	0	0	0	0	0	0	11.07	
PIN'S NUMBER	9	10	11	12	13	14	15	16
BBE ON	0	0	0	0	10.72	0	10.98	10.98
BBE OFF	0	0.00	0	0	0	0	11.11	11.11

IC501 M62495FP

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
CD PLAY	0	0	0	0	0	0	0	0	0	0	0	2.61
PIN'S NUMBER	13	14	15	16	17	18	19	20	21	22	23	24
CD PLAY	0.27	-2.67	0	0	0	0	0	0	0	0	0	0

IC503 BA3880FS

PIN'S NUMBER	1	2	3	4	5	6	7	8	9	10	11	12
BBE ON	0	0	3.48	1.72	5.35	5.36	5.36	5.34	5.35	5.35	0	5.35
PIN'S NUMBER	13	14	15	16	17	18	19	20	21	22	23	24
BBE ON	5.34	5.35	5.35	0	5.34	5.36	0	5.36	4.39	3.61	0	0

IC801 LA4625

PIN'S NUMBER	1	2	3	4	5	6	7
	1.63	9.62	0	5.07	2.62	1.63	2.04
PIN'S NUMBER	8	9	10	11	12	13	14
	9.69	9.45	0	9.74	0	9.32	22.4

IC802 LC7805

PIN'S NUMBER	1	2	3
	4.15	0	5.08

TRANSISTOR	Q801(2SB1370E)			Q803(2SC2712)			Q804(2SC2712)		
	E	C	B	E	C	B	E	C	B
	15.57	11.90	15.16	0.17	13.66	0.82	0	0.81	0.61

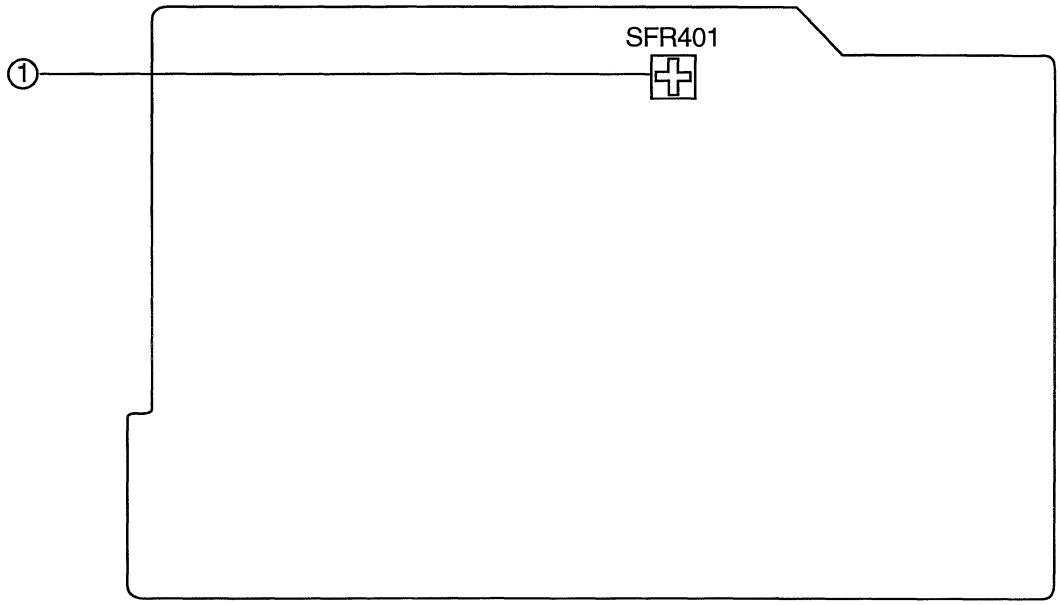
TRANSISTOR	Q806(8550)			Q807(8050)			Q811(DTA144EK)		
	E	C	B	E	C	B	E	C	B
POWER ON	11.47	11.46	10.76	11.10	11.90	11.79	11.05	11.03	0.82
STANDBY	11.47	11.44	10.86	11.13	11.90	11.81	11.10	0	11.01

POWER TRANSFORMER SECTION
TEST CONDITION: TUNER ON OR CD PLAY

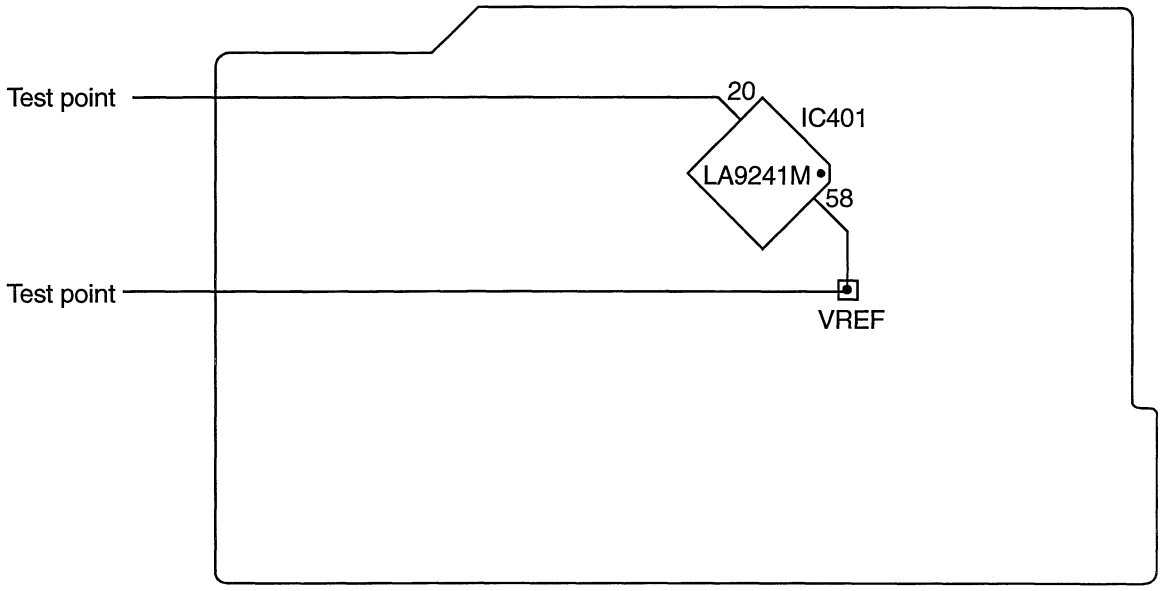
IC505 4558

PIN'S NUMBER	1	2	3	4	5	6	7	8
	5.41	0	5.34	0	5.33	5.38	5.41	10.75

TRANSISTOR	Q881(DTC114EK)			Q882(C1815)		
	E	C	B	E	C	B
POWER ON	0	0	8.87	0	0	0
STANDBY	0	0	8.87	1.61	1.59	0.99



ZCL5/F-01-05 TOP VIEW

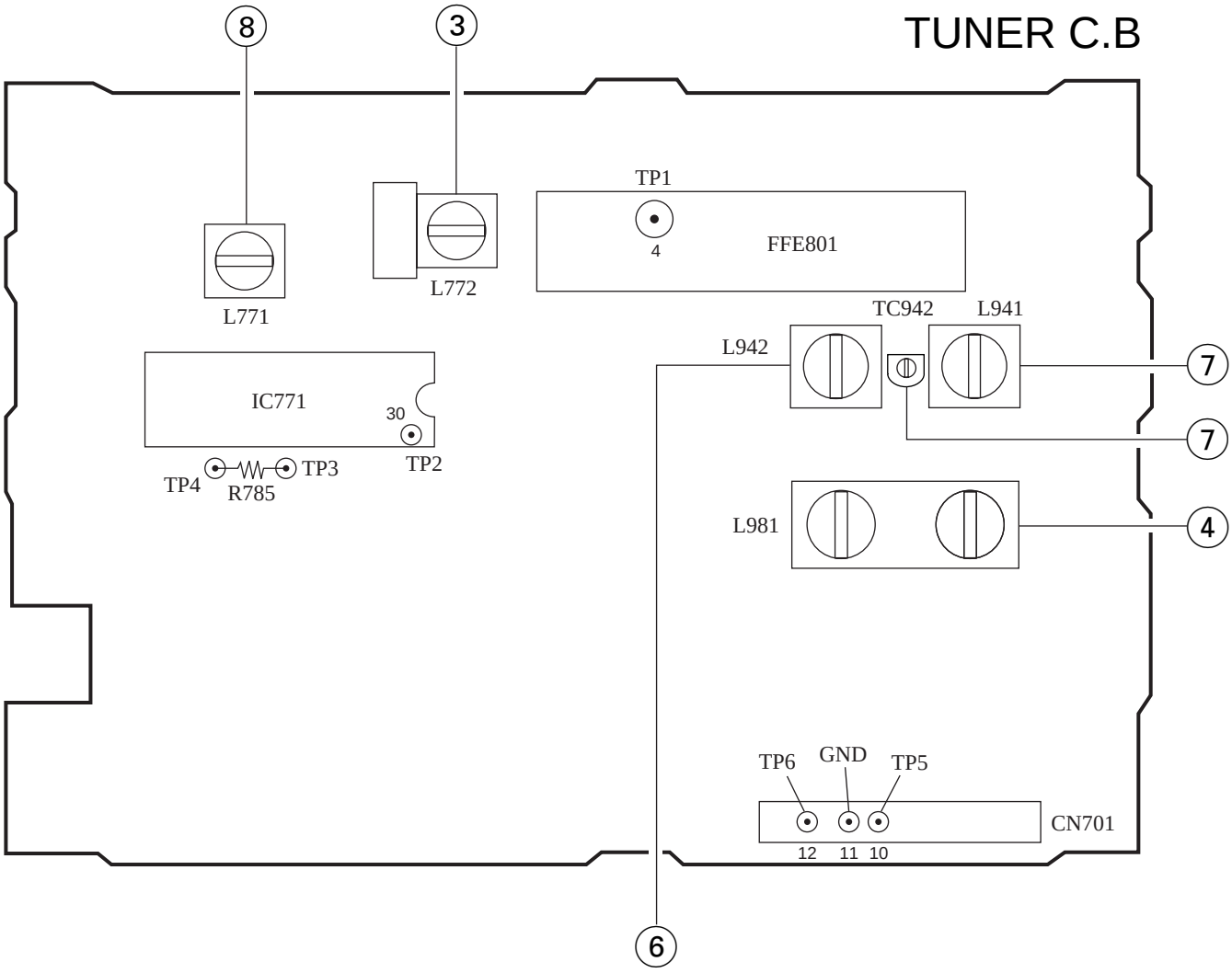


ZCL5/F-01-05 BOTTOM VIEW

1 FO Adjustment
Test point:IC401(LA9241M) 20PIN and 58PIN.

1) Connect an oscilloscope to the test points.
2) Turn on the power switch.
3) Load the test disc (TCD-782) and play.
4) Adjust SFR401 so that level is 0dB.
5) Turn off the power switch and take out the disc.

< TUNER SECTION >



1. Clock Frequency Check
   Settings: • Test point: TP2 (CLK IC770 pin30)
   Method: Set to MW 1602kHz and check that the test point becomes 2052kHz±45Hz (EZ).

2. MW VT Check
   Settings: • Test point: TP1 (VT)
   Method: Set to MW 1602kHz and check that the test point is less than 8.0V.
   Then set to MW 531kHz and check that the test point is more than 0.6V.

3. MW IF Adjustment
   Settings: • Test point: TP5, TP6
   L772 ..... 450kHz

4. MW Tracking Adjustment
   Settings: • Test point: TP5, TP6
   • Adjustment location: L981
   Method: Set to MW 999kHz and adjust L981 so that the test point becomes maximum.

5. FM VT Check
   Settings: • Test point: TP1 (VT)
   Method: Set to FM 87.5MHz, 108.0MHz and check that the test point is more than 0.5V (87.5MHz) and less than 8.0V (108.0MHz).

6. LW VT Adjustment
   Settings: • Test point: TP2 (VT)
   • Adjustment location: L942
   Method: Set to LW 144kHz and adjust L942 so that the test point becomes 1.3V±0.05V.
   Then set to LW 290kHz and check that the test point is less than 8.0V.

7. LW Tracking Adjustment
   Settings: • Test point: TP5, TP6
   • Adjustment location:
   L941 ..... 144kHz
   TC942 ..... 290kHz
   Method: Set up TC942 to center before adjustment.
   The level at 144kHz is adjusted to MAX by L941. Then the level at 290kHz is adjusted to MAX by TC942.

8. DC Balance/Mono Distortion Adjustment
   Settings: • Test point: TP3, TP4
   • Adjustment location: L771
   • Input level: 54dB
   Method: Set to FM 98.0MHz and adjust L771 so that the voltage between TP3 and TP4 becomes 0V±0.04V.
   Next, check that the distortion is less than 1.3%.

PRACTICAL SERVICE FIGURE

< TUNER SECTION >

< FM SECTION >

IHF Sensitiviy: (THD 3%)	Less than 14dB (at 88.0/98.0MHz) Less than 16dB (at 108.0MHz)
Distortion: (input 66dB)	Less than 1.5% (98.0MHz)
Stereo separation:	More than 16dB (98.0MHz)
Intermediate frequency:	10.7MHz

< MW SECTION >

Sensitivity: (S/N 20dB)	Less than 60dB (at 603kHz) Less than 58dB (at 999/1404kHz)
Distortion: (input 74dB)	Less than 2% (at 999kHz)

< LW SECTION >

Sensitivity: (S/N 20dB)	Less than 76dB (at 153kHz) Less than 71dB (at 198kHz) Less than 69dB (at 279kHz)
Distortion: (input 80dB)	Less than 3% (at 198kHz)

IC DESCRIPTION

IC, LC876564

Pin No.	Pin Name	I/O	Description
1	I-$\overline{\text{STEREO}}$/DRF	I	Connected to stereo detection and tuner CD ASP LA9241ML pin-54 DRF.
2	I-TUDO/I-SQOUT	I	Connected to tuner PLL IC LC72131 pin-⑥ DO and connected to CD DSP LC78622ED pin-55 SQOUT.
3	I-RDSDATA/O-COIN	I	Connected to RDS data input CD DSP LC78622ED pin-56 COIN and CD ASP LA9241ML pin-52 DAT.
4	O-$\overline{\text{F.LED}}$	O	Function LED control output.
5	O-M.STB	O	Connected to main shift resistor 4094 pin-① STB.
6	O-CLK	O	Connected to front shift resistor BU2092 pin-③ CLK, main shift resistor 4094 pin-③ CLK, and tuner PLL IC LC72131 pin-⑤ CL.
7	O-DATA	O	Connected to front shift resistor BU2092 pin-② DATA, main shift resistor 4094 pin-② DATA, and tuner PLL IC LC72131 pin-④ DI.
8	O-VOLCTL	O	Connected to VOL/P.EQ IC M62439SP pin-⑪ CONT.
9	I-TMBASE	I	Reference clock input for clock PLL IC LC72131 pin-⑦.
10	O-$\overline{\text{CKSFT}}$	O	Clock shift output is shifted: “L”
11	RESET	I/O	Microprocessor reset.
12	I-ACOFF	I	Hold status detection.
13	I-TU-SIG/I-MS	I	RDS signal level AD value input, and CD ASP LA9241ML pin-52 DAT.
14	VSS	—	GND.
15	CF1	—	Connected to 5.76 MHz oscillator
16	CF2	—	Connected to 5.76 MHz oscillator.
17	VDD1	—	Microprocessor power supply. (µ-com 5 V)
18	N.C	—	Not connected.
19	I-KEY1	I	Key AD value input.
20	I-KEY0	I	Key AD value input.
21	I-DSW	I	Deck MECA status detection input. (AD)
22	I-CDTSW	I	CD tray OPEN/CLOSE status detection input. (AD)
23	I-ENC1	I	AD value input from multiple jog rotary encoder outputs A and B.
24	M SENSOR	I	Electronic VOL’s AD value input from rotary encoder outputs A and B.
25	O-CE	O	Connected to tuner PLL IC LC72131 pin-③ CE.
26	N.C.	—	Not connected.
27	I-LEVEL	I	Level meter input.
28	I-RDS-CLK/I-WRQ	I	Connected to RDS CLK input and CD DSP LC78622ED pin-53 WRQ.
29	I-RMC	I	Remote control input.
30-42	G1-G13	O	FL tube grid output.
43-45	P33-P35	O	FL tube anode output.
46	VDD3	—	Microprocessor power supply. (µ-com 5 V)
47-50	P29-P32	O	FL tube anode output.
51	VP	—	Connected to minus power supply for FL, -VFL.
52-63	P17-P28	O	FL tube anode output.
64	P16/$\overline{\text{BBE}}$	O	FL tube anode output, and INT.DIODE MATRIX input.
65	P15/$\overline{\text{DOLBY}}$	O	FL tube anode output, and INT.DIODE MATRIX input.

Pin No.	Pin Name	I/O	Description
66	P14/AM WIDE	O	FL tube anode output, and INT.DIODE MATRIX input.
67	P13/FM WIDE	O	FL tube anode output, and INT.DIODE MATRIX input.
68	P12/LW	O	FL tube anode output, and INT.DIODE MATRIX input.
69	P11/SW	O	FL tube anode output, and INT.DIODE MATRIX input.
70	P10/OIRT	O	FL tube anode output, and INT.DIODE MATRIX input.
71	P9/RDS	O	FL tube anode output, and INT.DIODE MATRIX input.
72	VDD4	—	Microprocessor power supply. (µ-com 5 V)
73-78	P3-P8	O	FL tube anode output. /SHOP
79	P2/CAM	O	Deck mechanism status detection input. (CAM)
80	P1/AUTO	O	Deck mechanism status detection input. (AUTO)
81	O-QSURR	O	Q-surround IC control output.
82	O-SWSCAN	O	Key scan detection timing switch.
83	O-MOTOR	O	Deck mechanism motor control output.
84	O-FSTB	O	Connected to front shift resistor IC BU2092 pin-⑤.
85	O-CDOPEN	O	CD tray open control output.
86	O-CDCLOSE	O	CD tray close control output.
87	O-POWER	O	Power supply ON/OFF control.
88	O-$\overline{\text{MDRST}}$	O	MD unit 7ZG-9A reset signal output.
89	VSS2	—	GND.
90	VDD2	—	Microprocessor power supply. (µ-com 5 V)
91	O-RWC	O	Connected to CD DSP LC78622ED pin-54 RWC and CD ASP LA9241ML pin-53 CE.
92	O-$\overline{\text{CQCK}}$	O	Connected to CD DSP LC78622ED pin-57 $\overline{\text{CQCK}}$ and CD ASP LA9241ML pin-51 CL.
93	O-MUTE	O	Main mute output.
94	O-$\overline{\text{PL}}$	O	Deck mechanism plunger solenoid control output.
95-100	N.C.	—	Not connected.

IC, LA9241ML

Pin No.	Pin Name	I/O	Description
1	FIN2	I	Pin to which external pickup photo diode is connected. RF signal is created by adding with the FIN1 pin signal. FE signal is created by subtracting from the FIN1 pin signal.
2	FIN1	I	Pin to which external pickup photo diode is connected.
3	E	I	Pin to which external pickup photo diode is connected. TE signal is created by subtracting from the F pin signal.
4	F	I	Pin to which external pickup photo diode is connected.
5	TB	I	DC component of the TE signal is input.
6	TE–	I	Pin to which external resistor setting the TE signal gain is connected between the TE pin.
7	TE	O	TE signal output pin.
8	TESI	I	TES “Track Error Sense” comparator input pin. TE signal is passed through a band-pass filter then input.
9	SCI	I	Shock detection signal input pin.
10	TH	I	Tracking gain time constant setting pin.
11	TA	O	TA amplifier output pin.
12	TD–	I	Pin to which external tracking phase compensation constants are connected between the TD and VR pins.
13	TD	I	Tracking phase compensation setting pin.
14	JP	I	Tracking jump signal (kick pulse) amplitude setting pin.
15	TO	O	Tracking control signal output pin.
16	FD	O	Focusing control signal output pin.
17	FD–	I	Pin to which external focusing phase compensation constants are connected between the FD and FA pins.
18	FA	I	Pin to which external focusing phase compensation constants are connected between the FD– and FA– pins.
19	FA–	I	Pin to which external focusing phase compensation constants are connected between the FA and FE pins.
20	FE	O	FE signal output pin.
21	FE–	I	Pin to which external FE signal gain setting resistor is connected between the FE pin.
22	AGND	—	Analog signal GND.
23	NC	—	No connection.
24	SP	O	Single ended output of the CV+ and CV– pin input signal.
25	SPG	I	Pin to which external spindle gain setting resistor in 12 cm mode is connected.
26	SP–	I	Pin to which external spindle phase compensation constants are connected together with SPD pin.
27	SPD	O	Spindle control signal output pin.
28	SLEQ	I	Pin to which external sled phase compensation constants are connected.
29	SLD	O	Sled control signal output pin.
30, 31	SL–, SL+	I	Sled advance signal input pin from microprocessor.
32, 33	JP–, JP+	I	Tracking jump signal input pin from DSP.
34	TGL	I	Tracking gain control signal input from DSP. Low gain when TGL = H.
35	TOFF	I	Tracking off control signal input pin from DSP. Off when TOFF = H.

Pin No.	Pin Name	I/O	Description
36	TES	O	Pin from which TES signal is output to DSP.
37	HFL	O	“High Frequency Level” is used to judge whether the main beam position is on top of bit or on top of mirror.
38	SLOF	I	Sled servo off control input pin.
39, 40	CV–, CV+	I	CLV error signal input pin from DSP.
41	RFSM	O	RF output pin.
42	RFS–	I	RF gain setting and EFM signal 3T compensation constant setting pin together with RFSM pin.
43	SLC	O	“Slice Level Control” is the output pin which controls the RF signal data slice level by DSP.
44	SLI	I	Input pin which control the data slice level by the DSP.
45	DGND	—	Digital system GND.
46	FSC	O	Output pin to which external focus search smoothing capacitor is connected.
47	TBC	I	“Tracking Balance Control” EF balance variable range setting pin.
48	NC	—	No connection.
49	DEF	O	Disc defect detector output pin.
50	CLK	I	Reference clock input pin. 4.23 MHz of the DSP is input.
51	CL	I	Microprocessor command clock input pin.
52	DAT	I	Microprocessor command data input pin.
53	CE	I	Microprocessor command chip enable input pin.
54	DRF	O	“Detect RF” RF level detector output.
55	FSS	I	“Focus Search Select” focus search mode (± search/+ search) select pin.
56	VCC2	—	Servo system and digital system Vcc pin.
57	REFI	—	Pin to which external bypass capacitor for reference voltage is connected.
58	VR	O	Reference voltage output pin.
59	LF2	I	Disc defect detector time constant setting pin.
60	PH1	I	Pin to which external capacitor for RF signal peak holding is connected.
61	BH1	I	Pin to which external capacitor for RF signal bottom holding is connected.
62	LDD	O	APC circuit output pin.
63	LDS	I	APC circuit input pin.
64	VCC1	—	RF system Vcc pin.

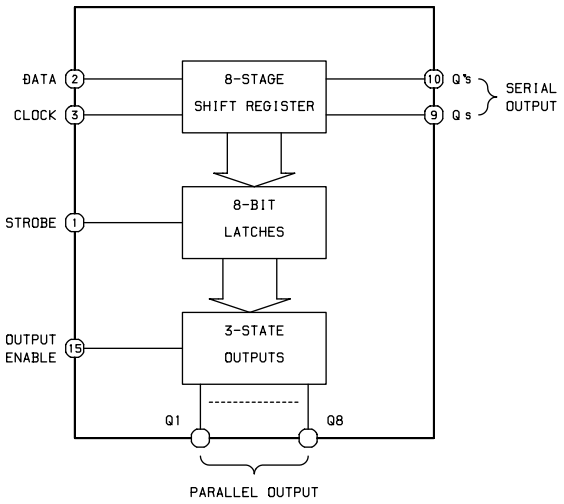
Pin No.	Pin Name	I/O	Description	
1	DEFI	I	Defect sense signal (DEF) input pin. (Connect to 0V when not used).	
2	TAI	I	For PLL.	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
3	PDO	O		Phase comparator output pin to control external VCO.
4	VVSS	—		GND pin for built-in VCO. Be sure to connect to 0V.
5	ISET	I		Pin to which external resistor adjusting the PD0 output current.
6	VVDD	—		Power supply pin for built-in VCO.
7	FR	I		Pin for VCO frequency range adjustment.
8	VSS	—	Digital system GND. Be sure to connect to 0V.	
9	EFMO	O	For slice level control.	EFM signal output pin.
10	EFMIN	I		EFM signal input pin.
11	TEST2	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
12, 13	CLV+, CLV–	O	Disc motor control output. Three level output is possible using command.	
14	V/$\overline{P}$	O	Rough servo or phase control automatic selection monitoring output pin. Rough servo at H. Phase servo at L.	
15	HFL	I	Track detect signal input pin. Schmidt input.	
16	TES	I	Tracking error signal input pin. Schmidt input.	
17	TOFF	O	Tracking OFF output pin.	
18	TGL	O	Tracking gain selection output pin. Gain boost at L.	
19, 20	JP+, JP–	O	Track jump control signal output pin. Three level output is possible using command.	
21	PCK	O	EFM data playback clock monitoring pin 4.3218 MHz when phase is locked in.	
22	FSEQ	O	Sync signal detection output pin. H when the sync signal which is detected from EFM signal and thesync signal which is internally generated agree.	
23	VDD	—	Digital system power supply pin.	
24-28	SL+ - PUIN	I/O	General purpose input/output pin 1 to 5.	The pin is controlled by the serial data command from microprocessor. When the pin is not used, set the pin to the input terminal and connect to 0V, or alternately set the pin to output terminal and leave the pin open.
29	EMPH	O	De-emphasis monitor output pin. De-emphasis disc is being played back at H.	
30	C2F	O	C2 flag output pin.	
31	DOUT	O	DIGITAL OUT output pin. (EIAJ format).	
32, 33	TEST3, TEST4	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.	
34	N.C.	—	Not used. Set the pin to open.	
35	MUTEL	O	L-channel 1-bit DAC.	L-channel mute output pin.
36	LVDD	—		L-channel power supply pin.
37	LCHO	O		L-channel output pin.
38	LVSS	—		L-channel GND. Be sure to connect to 0V.
39	RVSS	—	R-channel 1-bit DAC.	R-channel GND. Be sure to connect to 0V.
40	RCHO	O		R-channel output pin.
41	RVDD	—		R-channel power supply pin.
42	MUTER	O		R-channel mute output pin.

Pin No.	Pin Name	I/O	Description
43	XVDD	—	Crystal oscillator power supply pin.
44	XOUT	O	Pin to which external 16.9344 MHz crystal oscillator is connected.
45	XIN	I	
46	XVSS	—	Crystal oscillator GND pin. Be sure to connect to 0V.
47	SBSY	O	Subcode block sync signal output pin.
48	EFLG	O	C1, C2, single and dual correction monitoring pin.
49	PW	O	Subcode P, Q, R, S, T, U and W output pin.
50	SFSY	O	Subcode frame sync signal output pin. Falls down when subcode enters standby.
51	SBCK	I	Subcode read clock input pin. Schmidt input. (Be sure to connected to 0V when not in use.)
52	FSX	O	Pin outputting the 7.35 kHz sync signal which is generated by dividing frequency of crystal oscillator.
53	WRQ	O	Subcode Q output standby output pin.
54	RWC	I	Read/write control input pin. Schmidt input.
55	SQOUT	O	Subcode Q output pin.
56	COIN	I	Command input pin from microprocessor.
57	$\overline{\text{CQCK}}$	I	Command input read clock or subcode read input clock from SQOUT pin
58	$\overline{\text{RES}}$	I	LC78622 reset input pin. Set this pin to L once when the main power is turned on.
59	TST11	O	Test signal output pin. Use this pin as open (normally L output).
60	16M	O	16.9344 MHz output pin.
61	4.2M	O	4.2336 MHz output pin.
62	TEST5	I	Test signal input pin with built-in pull-down resistor. Be sure to connect to 0V.
63	$\overline{\text{CS}}$	I	Chip select signal input pin with built-in pull-down resistor. Be sure to connect to 0V while it is not controlling.
64	TEST1	I	Test signal input pin without built-in pull-down resistor. Be sure to connect to 0V.

Note: The same potential must be applied to the respective power supply terminals. (VDD, VVDD, LVDD, RVDD, XVDD)

IC BLOCK DIAGRAM

IC, BU4094BCF



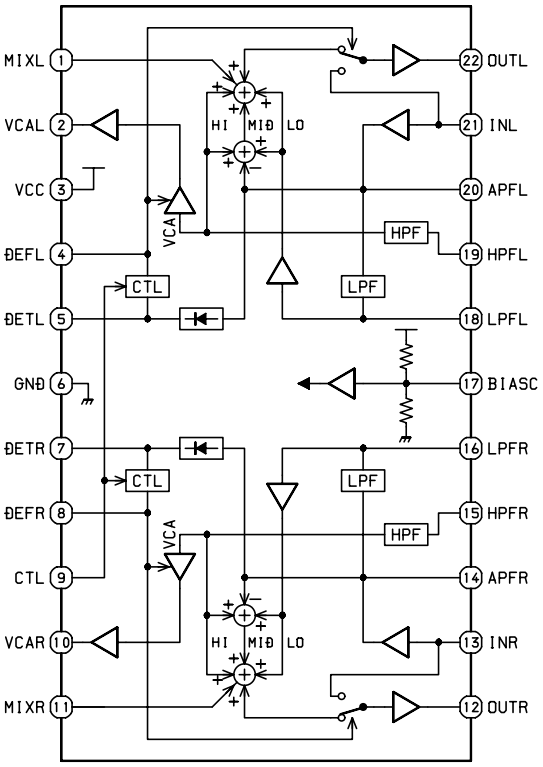
TRUTH TABLE

CLOCK	OUTPUT ENABLE	STROBE	DATA	PARALLEL OUTPUTS		SERIAL OUTPUTS	
				Q1	Qn	Qs	Q'S
↑	L	×	×	Z	Z	Q7	NO Chg.
↓	L	×	×	Z	Z	No Chg.	Qs
↑	H	L	×	No Chg.	No Chg.	Q7	No Chg.
↑	H	H	L	L	Qn-1	Q7	No Chg.
↑	H	H	H	H	Qn-1	Q7	No Chg.
↓	H	×	×	No Chg.	No Chg.	No Chg.	Qs

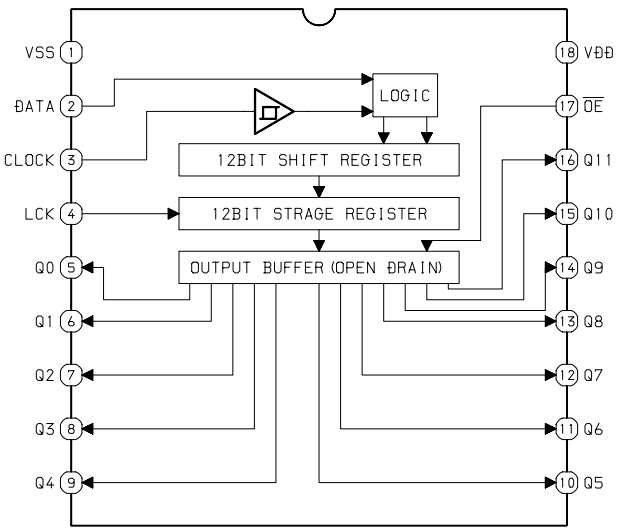
Z=High Impedance

X=Don't Care

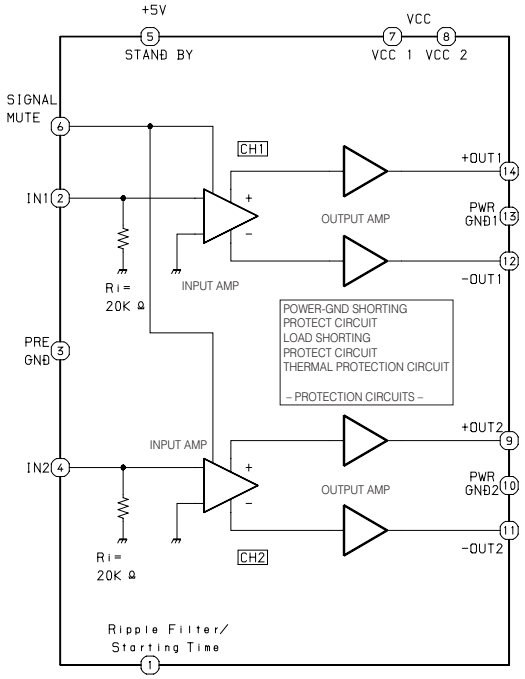
IC, BA3880FS



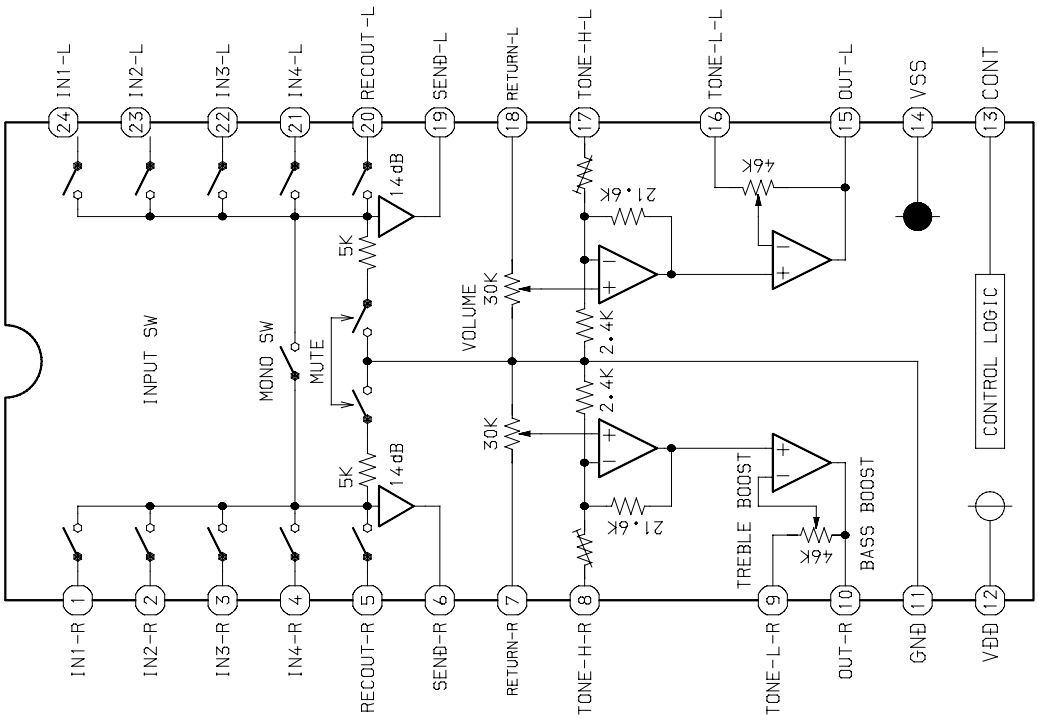
IC, BU2092



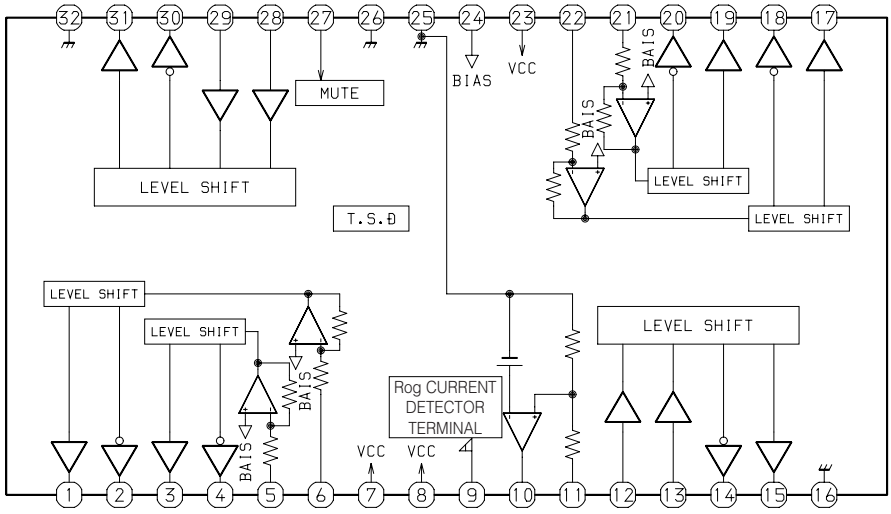
IC, LA4663



IC, M62495FP



IC, BA5936



MECHANICAL PARTS LIST 1/1

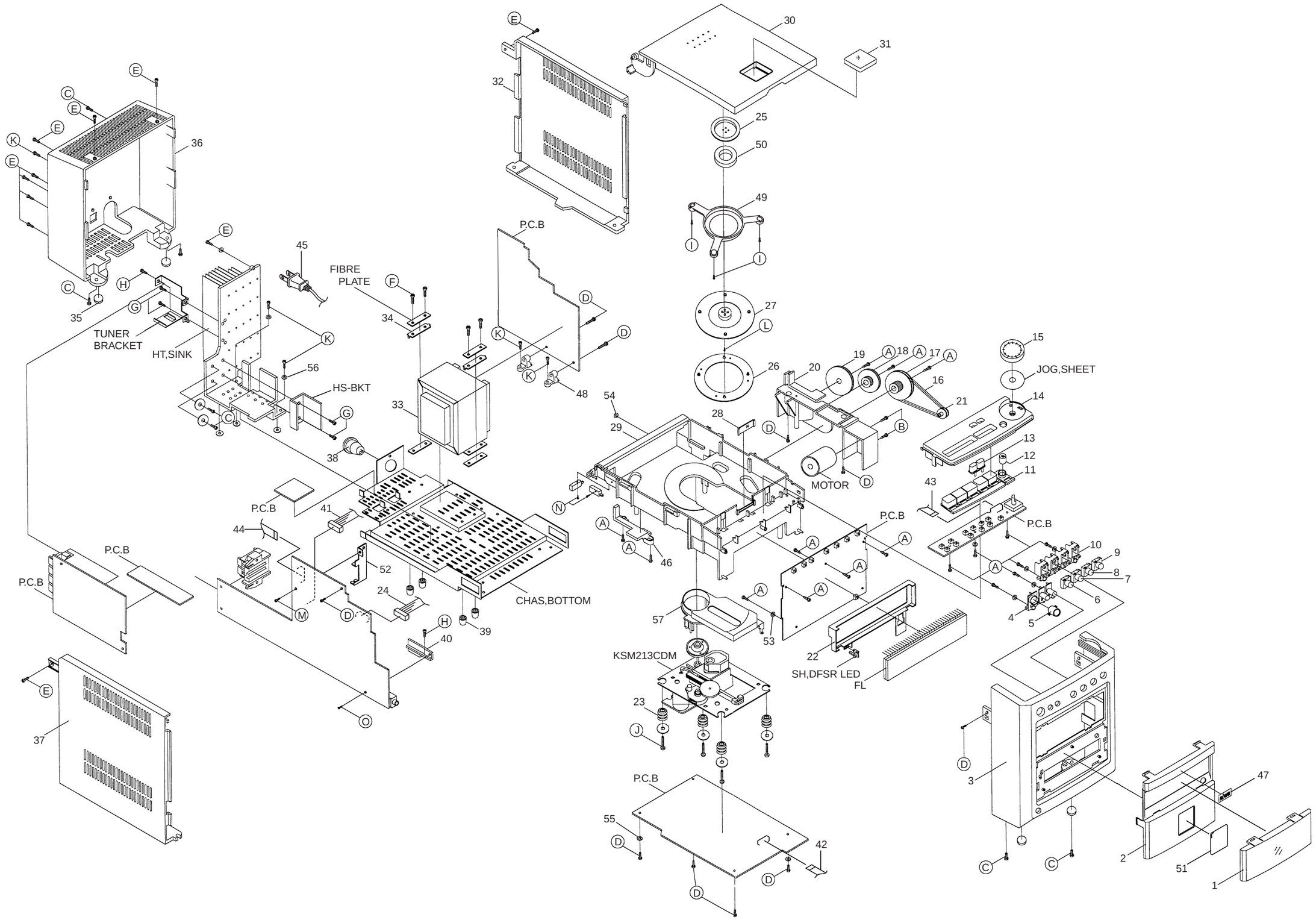
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-CL5-030-010		WINDOW,FL E<EZS>
1	8Z-CL5-009-010		WINDOW,FL SUH<KS>
2	8Z-CL5-211-010		PANEL,CD
3	8Z-CLF-007-010		CABI,FRONT E<EZS>
3	8Z-CLF-006-010		CABI,FRONY UH<KS>
4	8Z-CL5-014-010		BTN,SET POWER
5	8Z-CL5-016-010		BTN,POWER
6	8Z-CL5-020-010		BTN,CRYSTAL TU
7	8Z-CL5-021-010		BTN,CRYSTAL AX
8	8Z-CL5-022-010		BTN,CRYSTAL CD
9	8Z-CL5-023-010		BTN,CRYSTAL MD
10	8Z-CL5-015-010		BTN,SET FUNC
11	8Z-CL5-013-010		BTN,SET CD
12	8Z-CL5-018-010		BTN,CD OPEN
13	8Z-CLF-018-010		BTN,SET ENTER
14	8Z-CLF-001-010		PANEL,CONT S FA
15	8Z-CL5-019-010		BTN,JOG
16	8Z-CL5-217-010		BELT,PULLEY
17	8Z-CL5-205-010		PULLEY,GEAR CD
18	8Z-CL5-206-010		GEAR,MID CD
19	8Z-CL5-207-010		GEAR,CD
20	8Z-CL5-203-010		HLDR,GEAR CD
21	8Z-CL5-208-010		PULLEY,MOTOR
22	8Z-CLF-002-010		PANEL,FRONT S FA
23	88-CH6-220-010		CUSHION,CD A
24	8Z-CL5-627-010		F-CABLE,5P 2.5 250MM UL2468 AW
25	8Z-CL5-204-010		HLDR,CD CHUCK
26	88-CD9-210-010		BASE,CHUCK
27	88-CD9-211-010		RING,CHUCK
28	8Z-CL5-201-010		GUIDE,LED
29	8Z-CL5-210-010		CHAS,CD
30	8Z-CL5-005-010		LID,CD
31	8Z-CL5-008-010		WINDOW,CD
32	8Z-CL5-003-010		CABI,SIDE R
⚠ 33	8Z-CL5-683-010		PT,E
34	8Z-CL5-213-010		HLDR,(A) PWB TU
35	8Z-CL5-216-010		FOOT,CABI
36	8Z-CLF-010-010		CABI,REAR E
37	8Z-CL5-004-010		CABI,SIDE L
38	87-085-185-010		BUSHING, AC CORD (E)
39	8Z-NB8-240-010		COVER, PL
40	8Z-CL5-221-010		HLDR,BKT MOUNT
41	8Z-CL5-622-010		F-CABLE,9P 2.5 250MM UL2468 AW
42	8Z-CL5-621-010		FF-CABLE, 13P 1.0 220MM
43	8Z-CL5-603-010		FF-CABLE, 7P 1.0 150MM UL2896
44	8Z-CL5-604-010		FF-CABLE, 16P 1.0 100MM
⚠ 45	87-A80-092-010		AC CORD ASSY,E BLK SUN FAI<EZS>
⚠ 45	87-A80-108-010		AC CORD ASSY,K BLK 3P<KS>
46	SZ-CL5-540-000		CD BRACKET COVER
47	8Z-CL5-037-010		BADGE,AIWA
48	8Z-CL5-215-010		PLATE,MTG TX
49	SZ-CL5-63X-XX0		CD DOOR PLATE
50	S0-075-380-000		MAGNET
51	8Z-CLF-004-010		PLATE,DECO E<EZS>
51	8Z-CLF-003-010		PLATE,DECO SUH<KS>
52	8Z-CL5-214-010		HLDR,(B) PWB TU
53	S3-026-060-400		WASHER,2.6X6X0.4MM
54	86-CT4-228-010		WASHER,DIA:3.2X8X1
55	S3-035-080-400		WASHER,3.5X8X0.4MM
56	88-CL1-215-010		WASHER,4.4X10X1MM
57	SZ-CL5-590-000		PC COVER PLATE
A	87-743-074-410		ST2.6X8MM,PAB
B	87-251-092-410		SCREW M3X4
C	87-741-096-410		SCREW,3X10MM,KM BRASS BASED
D	87-741-095-410		ST3X8MM,BB HEAD
E	87-741-097-410		ST3X12MM,KAB
F	87-741-172-410		ST4X12MM,PM
G	87-741-095-410		ST3X8MM,BB
H	87-067-964-010		SCREW,3X6MM PB
I	87-253-035-101		SCREW,2X6MM PB
J	87-641-101-410		SCREW 2.6X17MM BB
K	87-253-095-410		SCREW,3X8 BB BRASS BASED
L	87-254-033-410		SCREW,2X4MM,BM
M	87-067-767-010		SCREW,2.6X6MM,PM BRASS BASED
N	87-B10-026-010		SCREW,1.7X8MM
O	87-253-035-410		ST 2X6MM,PM BRASS BASED

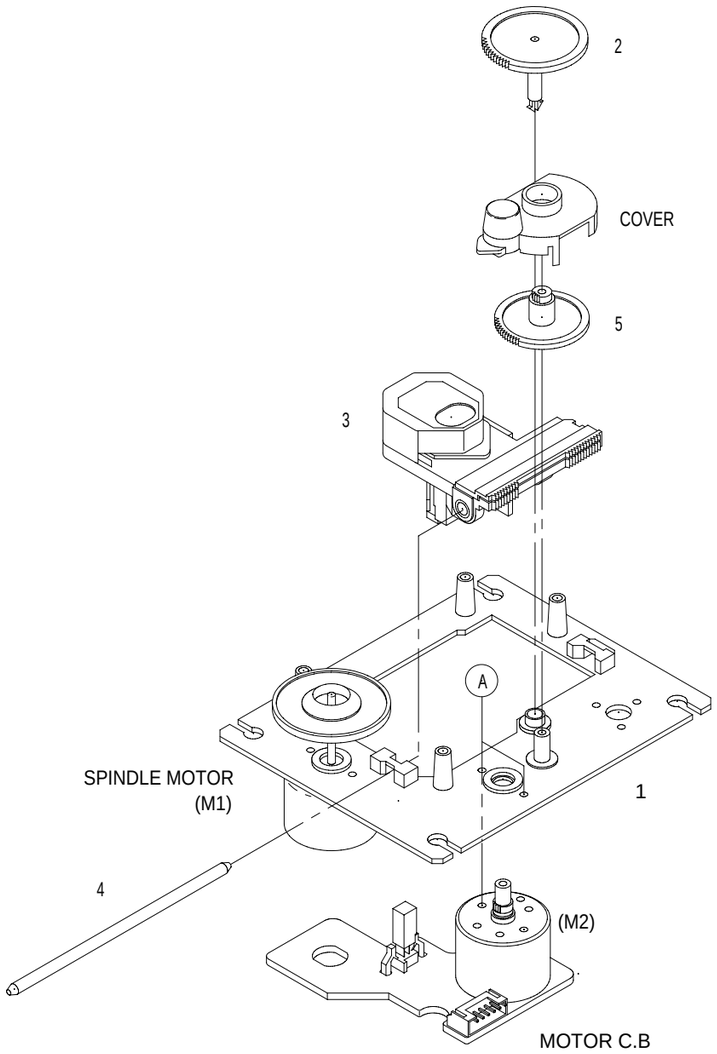
COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		

MECHANICAL EXPLODED VIEW 1/1



CD MECHANISM EXPLODED VIEW 1/1



CD MECHANISM PARTS LIST 1/1

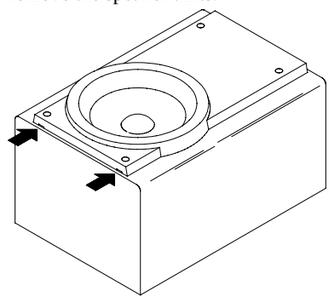
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	9X-262-620-210		MOTOR CHASSIS ASSY
2	92-626-907-010		GEAR(A)
3	87-A90-468-010		PICK UP KSS-213C
4	92-626-908-010		SHAFT SLED
5	92-627-003-020		GEAR(B)(RP)
A	97-621-255-150		SCREW+P2-3

SPEAKER DISASSEMBLY INSTRUCTIONS

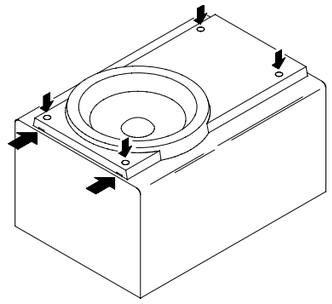
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit andthen remove the speaker units.



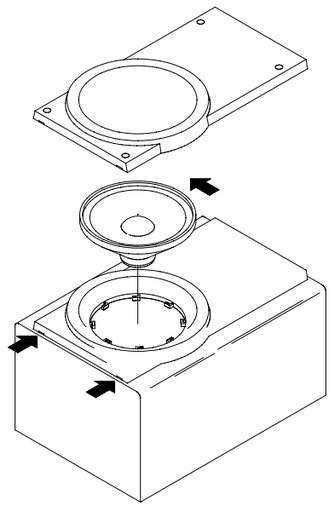
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hold where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

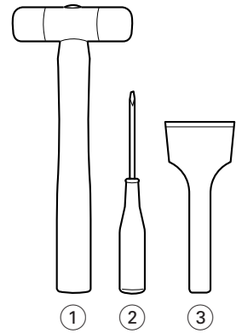


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counter-clockwise direction while inserting a flat-bladed screwdriver into one of the hollows arround speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turnning to clock-wise direction unitil "click" sound comes out.



Type.4



TOOLS

① Plastic head hammer
② (⊖) flat head screwdriver
③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.

2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.

3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

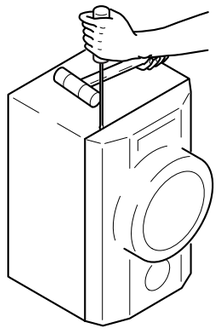


Fig-1

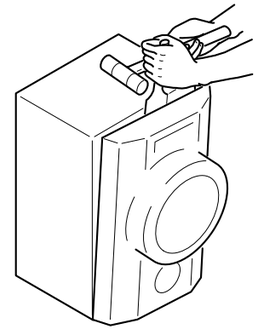


Fig-2

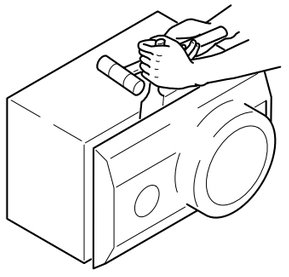


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-CL5-543-010		CORD,SP
2	8Z-CL5-506-010		GRILLE,FRAME ASSY
3	8Z-CL5-503-010		PANEL,FR
4	8Z-CL5-505-010		PANEL,TW
5	8Z-CL5-542-010		SPKR,TW25
6	8Z-CL5-541-010		SPKR,W100

サービス技術ニュース	
番号	連絡内容
G一　一	
G一　一	
G一　一	

アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)
AIWA CO.,LTD. 2–11, IKENOHATA 1–CHOME, TAITO-KU, TOKYO 110-8710, JAPAN TEL:03 (3827) 3111

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